
Student Dissertation

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BA (Hons.) History (Wales)

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Abstract

This study will consider the West Riding town of Wakefield, where in 1853 following a damning sanitary inspection from the General Board of Health, the town adopted the Public Health Act (1848). In 1869 Wakefield was subject to a second sanitary inspection from central government, with the published report showing that the town was in a worse sanitary condition than it had been since its adoption of the Act. For this, the author of the report blamed the local authority which was also heavily criticised by the national medical press.

Traditional representations of Victorian local government are of self-serving, factious shopocracies, adverse to central-government intervention, and too parsimonious to deliver any real measure of social reform. More recently this representation has been challenged, with ‘apologists’ pointing to the unprecedented fiscal, legal, and technological challenges that mid-century local authorities were facing, in their attempt to address the public health issues that were a consequence of rapidly-increasing urbanisation. Those local governments that failed to deliver effective sanitary reform have also been defended with the fact that Public Health legislation prior to 1875 was prolific, confusing, and mostly permissive. Additionally, and certainly for the first half of the century, Parliament was more protective of the private sector than the public, and so yet another obstacle for local governments wanting to deliver effective sanitary reform.

This study will consider whether the criticisms made of Wakefield’s Local Board of Health were fair in relation to the town’s water supply. The town’s private water company used the local, heavily-polluted River Calder as its source, much to the condemnation of both sanitary inspectors. Local press coverage and council meeting minutes will illustrate that, although there were mitigating factors in the local board’s unsatisfactory handling of the water question during the scope of this study, the Wakefield Local Board of Health largely conformed to the traditional representation of Victorian local government, as described above. This study finds therefore that the charges made against Wakefield’s local board following the publication of the 1869 report, were in fact justified.
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List of Abbreviations

BMJ  The British Medical Journal
MTG  The Medical Times and Gazette
TCMB Town Council Minute Book
WE   Wakefield Express
WFP  Wakefield Free Press
WJE  Wakefield Journal and Examiner
WYHC West Yorkshire History Centre
Personal Statement

I declare that this dissertation is entirely my own, independent work.

Some of this dissertation builds on work submitted for assessment for the Open University
A825 End of Module Assessment, Part Two.

No part of this dissertation has previously been submitted for a degree or other qualification
at the Open University, or any other university or institution.

Acknowledgements

I am immensely grateful to Dr Jane Adams for her invaluable support and guidance in
supervising this dissertation. I would also like to thank Dr Nick Cott, my A825 tutor, for his
encouragement and advice during the preparation of my original proposal. Thanks are also
due to the staff of the West Yorkshire History Centre for their helpfulness, and last but not
least, to my husband Gary, and son William, for their moral and practical support. Thank you.

For Robyn.
Chapter One

Introduction

On the twenty-first of May 1851, a superintending officer from the General Board of Health visited the West Riding Borough of Wakefield to report on its sanitary condition.¹ Mid-century Wakefield, like many urban centres, was challenged with increasing public health concerns. William Ranger’s three-day inquiry was therefore in response to the town’s petition for application of the Public Health Act.² After concluding that Wakefield’s dire sanitary state could be attributed to the defective nature of its local legislation (in terms of content and execution), Ranger recommended that the provisions of the Act be applied to the borough.³ The Act was applied on the 9th of May 1853, so constituting Wakefield Town Council as a Local Board of Health, to enjoy ‘the great and very valuable aids in the economical execution of public works’.⁴

Sixteen years after Wakefield’s adoption of the Public Health Act however, the town was subject to a further sanitary inspection from the Local Government Act Office. John Netten Radcliffe’s report was damning, suggesting regression rather than progression in the town’s public health. By publishing locally-obtained mortality returns, Radcliffe demonstrated that the health of the local population had not improved during the previous twenty years, and crucially, there had been a ‘formidable increase’ in the town’s death rate

² An Act for Promoting the Public Health, 1848, 11 & 12 Victoria, Ch.63.
³ Ranger, Report, p. 60; 11 George III, Ch.44; 36 George III, Ch.50.
⁴ Ranger, Report, p. 64; 16 Victoria, Ch.24.
since 1862. By 1866 the rate of mortality was 30.41 per thousand and consequently higher than some of its more industrialised neighbours, including Bradford.

**Figure 1.1 Comparative Mortality Rates of Wakefield and Bradford, 1861 to 1866.**


For local and national commentators this was perplexing, and Radcliffe questioned ‘[h]ow a result, so little creditable to a town of the extent and importance of Wakefield, has been brought about’. Wakefield was perceived as a market town, trading in malt, wool and

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5 ‘The Sanitary Administration and State of Wakefield’, *Wakefield Express* (hereon referred to as *WE*), 8 January 1870, p. 9. Radcliffe obtained his figures from Wakefield’s Medical Officer of Health.

6 ‘Sanitary’, *WE*, 8 January 1870, p. 10.
coal, and home to the largest corn and cattle markets in the North of England. Due to its ‘favourable soil and climate’, it was a successful agricultural and market-gardening centre, and though the town did engage in various industries including worsted spinning and the manufacturing of cocoa-fibre matting (its numerous works also including those for iron, dye, chemicals and leather-processing), it was considered, largely residential in character.

Nonetheless, Wakefield possessed clear geographic and commercial advantages, as standing on the south-eastern limit of the Yorkshire coalfield it had a plentiful and inexpensive supply of coal. Similarly, with the town being situated on the north bank of the navigable River Calder, local businesses were able to trade nationally and internationally. Wakefield also possessed two railway stations, making the ‘facilities […] superior to those of most other towns’.

**Figure 1.2 Population of Wakefield 1831-1861.** Source: ‘Sanitary’, *WE*, 8 January 1870, p. 9.

<table>
<thead>
<tr>
<th>Year</th>
<th>Population</th>
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<tr>
<td>1831</td>
<td>12,232</td>
</tr>
<tr>
<td>1841</td>
<td>14,754</td>
</tr>
<tr>
<td>1851</td>
<td>16,989</td>
</tr>
<tr>
<td>1861</td>
<td>17,611</td>
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Significantly for this study, Radcliffe was reporting on the town’s sanitary administration as well as its condition. Evidently this proved increduleous to a readership that acknowledged Wakefield as the de facto county town, home of the county asylum and jail, the Court of Sheriff, Office of the Clerk of Peace, Registry of Deeds, and other civic functions of the West Riding. Such response is borne out by the reactions to the report in the local and national press.\(^{10}\) Whereas Ranger appeared sympathetic in his earlier report suggesting that sanitary improvement had been frustrated by Wakefield’s Local Acts of 1771 and 1776 being inoperative, Radcliffe conversely lay the blame with the authority, that is Wakefield Corporation who, ‘very imperfectly conceived, and, as a consequence, very ineffectively carried out, the duties imposed upon it by the legislature’.\(^{11}\)

Many theories have been expounded regarding the apparent inaction, or hesitancy, of local authorities in addressing sanitary reform in the second-half of the nineteenth century. Gutchen, whilst demonstrating how centralisation was more perceived than realised, argues that in a society where central-government control was anathema, the General Board of Health was the least popular organ of government.\(^{12}\) Lubenow acknowledges the role of anti-centralisation as a mitigating factor, and suggests that where centrally-initiated local improvements were carried out, they were done so begrudgingly.\(^{13}\) Derek Fraser in contrast, argues that anti-centralisation was in fact a positive factor in that it stimulated local government activity. In his view, those local authorities that were most adverse to government intervention could be innovators of social reform, rather than ‘negative

\(^{10}\) ‘A Sanitary Inspector’s Visit’, *WE*, 15 January 1870, p. 5; See also page 7, footnotes 24-25.
obscurantists’. Fraser further argues that lack of sanitary progress did not necessarily signify obstinacy on the part of the local authority, but was rather a manifestation of incompetence. This view is shared by Hamlin and Wohl who argue that, whilst inaction was perceived centrally as resistance to improvement, it was in fact due to sheer frustration and bewilderment in the face of unprecedented legal, financial and technical challenges; Szreter and Millward conversely argue however that mid-century councils were perfectly able to tackle these challenges, as evidenced by the sophisticated Victorian railway network.

Yet it is not enough to evaluate a local authority’s response to its public health issues in terms of its attitude towards central government, or its level of practical expertise and experience. The town’s motivations for (and against) sanitary improvement are key. As Hassan and Hamlin demonstrate, increased trade prospects could prove powerful incentives for sanitary activism and municipalisation. Millward and Bell share this view, whereas Szreter goes further to suggest that initiatives were ‘often only’ taken when there were obvious commercial advantages for local businessmen. These arguments are clearly indicative that improvements in the local population’s health were not the main concern of every local board, and so in this respect, their physical composition is relevant; those boards

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that were composed of divergent political, social and economic interests would have had very different priorities, and hence difficulty agreeing on policies.

Aside from the economic consideration in gauging a locality’s response to its public health issues, Szreter argues for the importance of political will in delivering social reform, as sanitary enforcements could not be imposed on the ‘principle voting constituency of reluctant urban citizens’. 19 Hennock shares Szreter’s view that these reluctant economists - often collectivised in Ratepayers’ Associations - were a major source of obstruction to municipal improvements during this period. 20 One might also consider the importance of public opinion; local boards may have been influenced to act a particular way by public opinion, or, may have used public opinion as justification for their actions (or inactions); that is, they could be reactive or proactive. For example, Falkus argues that determined corporations could arouse public opinion against utility companies, where the company did not accept the council’s terms of purchase. 21 Similarly, civic rivalry should be considered as a legitimate expression of public and municipal opinion, and therefore a potential motivation for sanitary activism. 22

Having considered the local determinants of the efficacy of sanitary policy, it is also necessary to consider the national too, such as how far statutory laws and regulatory mechanisms enabled corporations to execute sanitary reform. Critically, public health legislation at the time of Radcliffe’s visit to Wakefield was largely permissive. Aside from

the defect of its voluntary nature, it was complex and confusing and lead to spasmodic adoption and the realisation that ‘the law is frequently unknown’.23 It was in this statutory context that Radcliffe’s report was published, bringing the charge from The British Medical Journal that ‘[a] worse maladministration by a local authority of the Sanitary Acts […] is scarcely possible to conceive’.24 Similarly disparaging articles featured in The Lancet and The Medical Times and Gazette, where the board was criticized for the arbitrary use of its powers, and its failure to endeavour to improve the water supply.25

The scope of this study falls within the publication of Ranger’s sanitary report of 1852 and Radcliffe’s report of 1869; the two substantive chapters each relating to a period in which the local board had an opportunity to improve Wakefield’s water supply. This period also coincides with the rise of the sanitary ideal, when there was an increasing awareness of the relationship between contaminated water and ill health. The two sanitary reports - though mediated - are excellent sources; sharing common areas of concern such as the water supply, drainage, and housing conditions, they allow for comparative analysis. The reports also contain qualitative witness testimony concerning the dire condition of the town, borne out by quantitative mortality statistics. In the case of Ranger’s enquiry, over one-third of Wakefield’s medical men gave evidence.26 These practitioners were both qualified to supply reliable data, and had significant interaction with the poor and their insanitary living conditions. Other government reports to be utilised - including an investigation into the state of the River Calder - are available online, and likewise include statistics, topographical

information and witness testimony. Their conclusions thus give a useful national/central interpretation of an essentially local/regional problem.

These national conclusions will be juxtaposed with local perspectives as evidenced in contemporary literature and Wakefield’s newspapers. The British Library has only recently begun to digitize Wakefield’s press, and at the time of writing, Wakefield’s Liberal newspaper, *The Wakefield Express*, and its politically less-partisan newspaper, *The Wakefield Free Press*, are not yet available online for the period covered in Chapter Two. The closure of the local studies library due to the Covid-19 pandemic – and where these newspapers are held on microfiche – means that the only local newspaper featured in Chapter Two is the Tory *Wakefield Journal and Examiner* (listed on the British Newspaper Archive as *Wakefield and West Riding Herald*). This is clearly not ideal; whilst the question of the water supply was not especially political in Wakefield (this study will show that both Liberal and Tory councillors wanted a municipal supply), the local board – being the exact same body as the council and the corporation – was politically factious, and the local press was heavily politically-prejudiced. This bias is fortunately redressed in Chapter Three where all three newspapers are available online.

The closure of the local archives has also meant that it has not been possible to search, and access records for, the Wakefield Waterworks Company who clearly had agency in the water question; a register of shareholders would have proved particularly useful for an exact determination of those council members who were shareholders in the company. Nonetheless, council and committee minutes will be utilised to establish the local board’s chronological response and confirm its decision making. These manuscripts – as well as
Ranger’s report - were accessed (and notes made) for A825, and so prior to the closure of the local studies library and archive offices. Other sources to be utilised - including trade directories, censuses, and government legislation - are opportunely available online, as is Radcliffe’s report which was published in full by the local press.

A major criticism contained in both Ranger’s and Radcliffe’s sanitary reports was the use of the heavily-polluted River Calder as the source of the town’s water supply. Ranger further recommended that the water supply should be municipalised, yet at the time of Radcliffe’s visit it was still in the hands of a private company. Therefore, in establishing whether contemporary criticisms of the local board were fair in regard to the water supply - and in seeking to justify why Wakefield’s ‘water question’ was not answered by 1869 - it is necessary to recognise that the local board of health had an obligation to either supply better water to the town itself, or to ensure that the water company was doing so. As such, this study will focus on two considerations; firstly, why in 1869 the water was not yet publically supplied, and secondly, why it was still being sourced from the river. Chapter Two will therefore consider why the water supply was not municipalised by the time of Radcliffe’s visit, by examining the corporation’s first purchase attempt in 1853-54 by asking how far the local board was to blame for the purchase failure. Chapter Three will then address why the town’s water was still being taken from the river in 1869, by questioning the local board’s motivations in attempting to block the Water Company’s parliamentary bill for an alternative source in 1861-1862. Chapter Four will serve as a conclusion, and offer opportunities for further study.
In appraising the role of the local board in the water question, its actions (or inactions) will be assessed in the context of the town’s unique social, political and economic geography; Chapter Three particularly will consider Wakefield’s apparent industrial stagnation during the first half of the nineteenth century, and its pursuit of economic hegemony in the second half. Local determinants as per the secondary literature review will be considered, as will the effectiveness and value of public health legislation. Consideration will also be made of mid-century attitudes towards the public ownership of utilities, as well as its progress as a phenomena; this will allow Wakefield’s position to be understood in both a regional and national context.

Given these local and national determinants, if it is found that the local board had legitimate cause to act as it did, that public health legislation or other national mechanisms (such as borrowing powers) did not enable it to municipalise the water supply, or that there were sound sanitary arguments for thwarting the company’s efforts to improve the supply in 1861-62, then it may be concluded that contemporary criticisms of the local board were not fair. Conversely, if it is found that the local board had no justifiable reason to follow its course of action (where other options were viable), that it failed to exploit the legislative powers made available to it, or that it was motivated for reasons other than health, then the conclusion that contemporary criticisms of the local board were in fact fair, may be drawn.
Map 1.1 – Showing the Town of Wakefield. The blue dot represents the area where the town’s sewage was emptied into the River Calder.

Chapter Two

The Local Board’s First Attempt at Municipalising the Water Supply, 1853-1854: Why was it Unsuccessful and How Far was the Local Board to Blame for its Failure?

In examining the local board’s acquisition attempt of the water supply from November 1853 to March 1854, this chapter will consider its purchase strategy within a number of local and national contexts. An understanding of the composition of the local board is key, and should indicate its motivation and commitment to assuming the water supply; this is especially relevant as the administrative roles performed by local authorities are argued to have been directly related to their social and political structure.¹ The local board’s composition may also indicate how it viewed its own function and that of central government - particularly in regard to public health - and so will enable an evaluation of anti-centralisation as a positive or negative influence on its sanitary policy. Of course, the Local Board of Health was not the only party with agency in the water question; it was an elected body, so it is also pertinent to consider the opinion and influence of the local electorate who already felt that Wakefield was ‘groaning in poverty and obscurity’ since its controversial incorporation in 1848.² Indeed, there were circumstances peculiar to the town in 1853-54 that increased the burden of local taxation on the town’s rate-payers (just as national taxation had also increased due to war) and these are likewise relevant to this study. The role of the directors and shareholders of the private waterworks company might also be considered, with a view to ascertaining if at all the unsuccessful purchase attempt was more to do with the resolve of the company than any failing on the part of the local board.

¹ Derek Fraser, Municipal Reform and the Industrial City: Themes in Urban History (Leicester: Leicester University Press, 1982), p. 10.
From a national perspective, consideration of the role of central government, and the legislative framework in place during the third-quarter of the nineteenth century, is necessary for an appraisal of the local board’s conduct. At mid-century, capabilities for raising large capital were greater for private enterprises than for corporations. Moreover, at the time of Radcliffe’s survey, public health legislation was largely permissive, lacked public-interest clauses, and operated with the absence of strong monitoring agencies, meaning there were many obstacles to public ownership.3 This was especially so in the immediate period after Ranger’s visit, when the Local Government Act (1858) and the Sanitary Act (1866) were not yet passed, and when property was ‘inviolate’.4 That is not to suggest however that ineffectual legislation was a sound justification for incompetency; it will be argued in this chapter that there were in fact clauses in the Public Health Act (1848) that the Wakefield board failed to exploit. If it is found that the board had valid reasons to disregard these legislative options, that the water company was uncooperative, or that local opinion was adverse to municipalisation, there may be some justification in the local board’s conduct and the consequent failed purchase attempt. Alternatively, if the local board’s purchase strategy cannot be justified given those local and national determinants, if the water company was obliging, and local public opinion was in fact supportive of public purchase, then the conclusion that the local board was to blame for the purchase failure is defensible, and therefore contemporary criticisms of the local board were fair.

Ranger’s 1852 report into the sanitary condition of Wakefield stated that wherever the

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Public Health Act should be applied, the water supply should be in the hands of the local board.⁵ A cheap and plentiful supply of water was needed for domestic use, flushing sewers and drains, watering and cleansing streets, and for firefighting purposes; this anticipated supply could not be realised by private joint-stock companies whose first commitment was to their share-holders.⁶ Furthermore, Ranger contended that the requirements of the Act could not be fulfilled whilst the ‘objectionable’ River Calder remained the source of the town’s supply. Ranger urged alternative and improved sources to be sought, as the specifics of waterborne contamination were very well understood given the plethora of public health enquiries from the 1840s.⁷ It is in this context therefore that the council’s failed, first acquisition attempt in 1853-1854 should be understood as a failure to procure a purer supply of water for the town.

When Wakefield Waterworks Company was first enacted to take water from the Calder in 1837, the river according to contemporary witnesses was ‘sweet and clean’ and ‘full of fish’.⁸ It rose at Heald Moor in Lancashire and flowed some thirty miles east through the Yorkshire heavy woollen region, incorporating the textile towns of Todmorden, Hebden Bridge, Brighouse, Dewsbury, and Wakefield, before merging into the River Aire at Castleford (see Map 2.1 page 15). Many woollen mills were built on its banks, and because of the various processes involved in the industry, the river turned ‘fouler and more foul after leaving each successive mill’.⁹ Other industries that polluted the river in and above

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⁷ Ranger, Report, p. 37; ‘The Sanitary Administration and State of Wakefield’, Wakefield Express (hereon referred to as WE), 8 January 1870, p. 10; I refer particularly to the Royal Commissions on the Health of Towns, 1843-5, see Bibliography page 58.


⁹ Third Report, p. xxi.
Wakefield Map 2.1 - Showing the River Calder’s Route through West Yorkshire (with Leeds to the north of Wakefield, Bradford to the north-west, and Dewsbury to the west).

included soap and grease works, tanneries, and breweries, so that by the time of Ranger’s visit some fifteen years after the water company was founded, the river was collecting the ‘sewage and refuse of a densely crowded manufacturing district, whose united population [was] nearly quarter of a million’.10

On reaching Wakefield the river water was not filtered by the water company, so ‘living and dead objects issue[d] from the pipes’. Many also felt the ‘exorbitant price’ which was charged for water ‘entitle[d] them to more consideration […] from the Waterworks Company’. The company further refused to supply some households who were ‘desirous of being supplied’, and there was agreement amongst Ranger’s medical witnesses as to the scarcity of supply to the poorer and more needful parts of town. Dissatisfaction with the company was clearly evident, and ‘want for a better supply [had] been long felt’.11 The corporation (also constituted as the council and the local board) appeared intent on addressing this displeasure; when considering the perceived benefits of adopting the Public Health Act prior to Ranger’s visit, the Town Clerk noted the ‘useful provisions for securing an ample supply of water, both for private houses, and for […] trading and manufacturing purposes’.12 As Hassan argues of other recently established corporations facing urgent issues in the 1840s and 1850s, there was little disagreement on the Wakefield Board that the water supply needed to be improved.13

The seventy-fifth section of the Public Health Act enabled local boards to ‘supply […] water as may be proper and sufficient for all reasonable purposes’, by engaging, purchasing,
or establishing a waterworks company. However, it was not lawful for a local board to establish works within its district if an existing company was able and willing to supply upon terms; if there was any disagreement between the two parties as to ‘reasonable terms’, the matter was to be referred to the General Board and settled by arbitration.\textsuperscript{14} There was no provision in the Act - or at any time during the nineteenth century in fact - for the compulsory purchase of a waterworks company (unlike trams and electricity), and only in exceptional cases was this ever permitted.\textsuperscript{15} Similarly, the Act only enabled local boards to ensure a sufficient supply - they were not instructed until 1875 to ‘supply water where it is required’ - and the Act’s terminology such as ‘sufficient’ and ‘reasonable’ was open to interpretation.\textsuperscript{16}

In accordance with the legislation, the corporation’s options in 1853 seemed thus; to purchase the company with a view to supplying water from a different source, or if they were unable to agree purchase terms, to take the matter to arbitration. The board might go to Parliament with a Waterworks Act, though it was well understood that Parliament was likely to protect the interests of the water company.\textsuperscript{17} Alternatively, the board might entrust the company to improve the quality of its existing supply, and allow it to continue to serve the town – provided that the company was of course ensuring that the local board was able to fulfil its public health function as vaguely specified by the Act’s seventy-fifth section.

Consequently, five months after adopting the Act, the local board - seemingly exploring all options - appointed a committee to determine how the water company was intending to improve its supply, and also whether it was prepared to sell.\textsuperscript{18} The company replied that,

\textsuperscript{14} \textit{An Act, 1848}, 11 & 12 Victoria, Ch.63, p. 755.
\textsuperscript{16} \textit{Public Health Act, 1875}, 38 & 39 Victoria, Ch.55.
\textsuperscript{17} ‘Our Local Legislators’, \textit{Wakefield Journal and Examiner} (hereon referred to as \textit{WJE}), 23 December 1853, p. 5.
\textsuperscript{18} WYHC, WW1/1, TCMB 1848-1853, 24 October 1853.
aside from adopting methods of filtration, it was investigating what measures were necessary to extend and upgrade its works. Furthermore, the directors were willing to recommend the transfer of the works to the local board for their ‘original cost’, as they agreed that for sanitary purposes, waterworks were better in the hands of the local authority. Clean water under constant pressure needed to be made affordable and available to all classes of customer, and not just those who were willing to pay. It made little sense for the water company to attempt this; as Szreter argues, it was financially illogical for any commercial enterprise to entertain the necessary investment costs.

On receiving the water company’s reply, Councillor Clarkson – a surveyor - reminded the local board that owing to the borough being enclosed by active coalfields on three sides, it was restricted as to where to gain a better supply. One possible option was Cold Hiendly Reservoir five miles south-east of Wakefield, but that would have made the existing works’ plant and reservoirs unsuitable owing to the transverse aspect of its pipes and mains. Councillor Clarkson thought the question should be, not how much the company would sell for, but rather how much the company was worth. Nonetheless the local board wrote back to Wakefield Waterworks Company late October asking it to name a fixed amount. The company responded with its offer of £32,706 16s 7d – the amount so far expended - or the acceptance of a perpetual guarantee of four per cent. Additionally, at a special meeting of the water company held late November, the directors were approved by a large majority to reach an early settlement with the corporation, and not to endorse any proposed new schemes

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19 At this point, no amount was fixed; ‘The Water Question’, *WJE*, 21 October 1853, p. 8.
22 WYHC, WW1/2, TCMB 1853-1857, 24 October 1853.
23 WYHC, WW1/2, TCMB 1853-1857, 9 November 1853.
whilst they were in negotiations.24 This supports Falkus’ view that it was more preferential for water companies to negotiate for favourable terms, rather than risk costly arbitration or compulsory purchase, should the waterworks company fail to deliver on behalf of the local board, what the board deemed a sufficient supply of water. In this respect, the company perceived municipalisation as a solution to the deficiencies of private enterprise, and was willing and able to sell.25

Having received the water company’s reply, the local board could have come to an agreement with the company directly, or through arbitration as per the powers afforded to it by the Act. However, no attempt was made at this. The board instead responded by resolving that the General Purposes Committee should be instructed to employ an engineer to value the company, to obtain a sample of their water for analysis, and to report upon a better supply by means of a survey.26 That the local board would want to have the works valued is not unreasonable; it would after all have to go to the later expense of obtaining the necessary plans and an Act of Parliament to acquire an alternative supply. Rather, the issue was that the board should have endeavoured to come to terms with the company first, before commissioning a survey, else it would appear that the council was misleading the company until they could find their own scheme to go to Parliament with.27 Indeed the board’s resolution was contentious for two main reasons, and highlighted divisions that would impede progress on the water question.

The first cause of conflict was that the resolution was passed by only a few Liberal members after the council meeting had essentially finished and the Conservatives disbanded.

26 WYHC, WW1/2, TCMB 1853-1857, 28 November 1853.
Without doubt, Wakefield Corporation was a factious corporation; the first municipal election in 1848 had rapidly become a party affair with a Ratepayers’ Association being formed to principally secure the election of the Tories (though in the event, only one ward out of seven returned a Ratepayers’ Candidate).\(^{28}\) Local elections were fraught with bribery and corruption, and in 1853 the corporation was perceived by its Tory minority as a place where ‘certain component parts of the council […] would sacrifice […] the interests of the borough to the purposes of faction’.\(^{29}\) This also supports Fraser’s view that the extension of municipal patronage could arouse suspicion because of how individuals might exercise their power.\(^{30}\)

The board’s divisive nature is easily explained however; by reflecting the essentially twin nature of the town as a residential and industrial centre, the board was made up of men of various social positions, wealth levels, religions and employments. The town’s mostly Conservative, Anglican old elite was represented by the Corn Factors and the professional classes. In opposition, the Liberal, mostly Dissenting new elite was represented by the town’s manufacturing and commercial leaders. Moreover in 1853 nearly thirty percent of the board was comprised of shopkeepers, and so conformed to the stereotypical mid-century provincial town council, characterised by ‘internal divisions [and] cross-cutting interests’.\(^{31}\)

The second and perhaps more critical issue was the resolution itself. Rather than employ a local civil engineer to carry out the valuation and survey (as neighbouring Bradford had done for its sewerage works for example), the corporation was to employ the services of William Ranger from the General Board.\(^{32}\) In Wakefield, the economist elements on the

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\(^{28}\) Taylor, _Making_, p. 27.


\(^{31}\) 1851 England Census <https://www.ancestry.co.uk/search/collections/8860> [accessed 22 July 2020]; WYHC, WW1/1, TCMB 1848-1853, 10 November 1851, 9 November 1852, 9 November 1853; Szreter, ‘Economic’, p. 705.

\(^{32}\) ‘Local’, _WJE_, 16 December 1853, p. 5.
board (representing small businesses and household ratepayers), the conservative press, and the waterworks company were unimpressed. Certainly mid-century Wakefield supports Gutchen’s representation of local antipathy towards central interference; for example the corporation had resolved on one occasion that it did not ‘recognise any right or authority’ of the General Board to obtain some information that it had requested from it.33 There is also some support for Fraser’s argument that anti-centralisation positively stimulated local activity.34 Wakefield Corporation was ideologically anti-centralist, and though in 1853 it had not achieved any notable measure of social reform (having only being constituted as a Local Board of Health earlier that year), it certainly seems it intended implementing it. Historically, one of the first things the town had done on being incorporated in 1848 was to set up a Sanitary Committee, and in 1851 it had petitioned for the Public Health Act when in fact the town’s mortality rate of 24.13 per thousand meant that it could have been imposed.35 The board’s resolution in November 1853 to have the supply of water in public hands was motivated by the Sanitary Committee’s efforts to put the town in a healthier state in view of a threatened Cholera attack; in 1849 the disease had cost two-hundred and forty-one lives, over one hundred of which were resident in the asylum.36 There is no doubt that mid-century Wakefield was alive to the need for public health improvement, yet this is not to suggest that the local board’s water policy was based on any perceived intervention from London; it did after all apply for the services of a central-government agent, and in any case, the General

33 WYHC, WW1/2, TCMB 1853-1857, 21 December 1853.
34 Fraser, Municipal, p. 9.
35 ‘Sanitary’, WE, 8 January 1870, p. 9.
Board lacked substantial powers or indeed the inclination to intervene, and so supporting Gutchen’s argument that the threat was more theoretical than actual.\textsuperscript{37}

From the perspective of the water company and the conservative \textit{Wakefield Journal}, having Ranger value the works was an insult; he had criticised the quality and quantity of the company’s water in his sanitary inquiry only two years previously, and so any valuation would hardly be impartial.\textsuperscript{38} It is unsurprising then that the company declined the survey.\textsuperscript{39} Therefore, with the corporation insisting on a survey by Ranger for valuation purposes, and with the company refusing for quite valid reasons, the two parties had reached an impasse. After reiterating its offer and giving the council two weeks’ notice, the proposal was rescinded by the company in March 1854.\textsuperscript{40}

With negotiations for the sale of the works now closed and its valuation no longer necessary, Ranger was employed by the local board to survey for a better supply of water. This prospect highlighted other contemporary concerns aside from that of governmental intrusion. As the Tory \textit{Wakefield Journal} was keen to point out, Ranger was relatively inexperienced in building waterworks, and even accused him of plagiarising other engineers’ reports. In fact, the practical expertise and scientific knowledge of the whole General Board and its officers was questioned, and attributed to the ‘most miserable failure’ at Croydon.\textsuperscript{41} If local governments and local public opinion had so little faith in the expertise of a centralised, supposedly-specialist institution, it is little wonder that they hardly embraced the assumption

\textsuperscript{38} ‘Wakefield Water Works’, \textit{WJE}, 20 January 1854, p. 5.
\textsuperscript{39} WYHC, WW1/2, TCMB 1853-1857, 21 December 1853.
\textsuperscript{40} WYHC, WW1/2, TCMB 1853-1857, 15 March 1854.
\textsuperscript{41} ‘Local’, \textit{WJE}, 16 December 1853, p. 5; Croydon had experienced increased cases of fever, dysentery and diarrhoea following the establishment of drainage works and a new water-supply, instructed by the General Board. The General Board was later exonerated.
of these extraordinary tasks themselves. This would support the arguments of Hamlin and Wohl, that doubt and uncertainty when faced with executing large-scale public works, often manifested itself in procrastination. However, in the case of Wakefield in 1853-54, though there was some discussion about the logistical and technical practicalities of obtaining alternative water supplies (such as Councillor Clarkson’s remarks regarding Cold Hiendly, page 18), there is little evidence to suggest that the board’s lack of expertise was a fundamental issue; it can be argued in fact that the local board acknowledged its deficiency and sought to address it by engaging a supposed central-government expert. Wakefield’s experience gives more credence to Szreter’s argument that the challenge of public works was not a sound justification for inaction.

Further divisive implications of employing Ranger were those of principle and cost. At mid-century (and the height of anti-centralisation), the General Board was viewed by some as the ‘precious embodiment of Whig-jobbery’. It did not go unnoticed that Ranger, in completing his examination and report, would be the one to benefit from his work. Calling for a survey free from political patronage, the Wakefield Journal warned ratepayers that ‘whatever expense he feels inclined to go […] he can charge and obtain for that purpose’, and especially so as there was no geographical confinement to his investigation. This substantiates Fraser’s argument that urban communities feared expenditure over which there was no local control, and the fact that Ranger was alleged to have been given carte blanche, was particularly pertinent to mid-century Wakefield.

45 Fraser, Evolution, p. 75.
The economist elements on the local board (supported by the town’s small household ratepayers) and those councillors that were opposed to Ranger’s employment - whether in principle or for pecuniary reasons - were able to rally these ratepayers against the Liberal council’s policies with some justification. Under the rating system of the old Street Commissioners prior to 1853, small property had been exempted. Since the adoption of the Public Health Act however, a rate of one shilling and eight pence had been laid on every four- pounds rental, so a large portion of the borough that had previously been excluded from rating was now taxed.46 The ratepayers of the town also had the Soke Rate to pay after the town’s purchase of the Soke rights from the 31st December 1853.47 Whilst they were very happy to be relieved from ‘this hateful monopoly’, the ratepayers had to pay for the privilege.48 The issue here was that rather than paying the purchase price of £18,000 over thirty-plus years as originally understood, it was to be paid over just six.49 The ratepayers then, aside from being taxed at a higher rate, were paying (perhaps unjustly) for something that future taxpayers would benefit from, but not be contributing towards themselves. There was also the Commissioners’ Lighting Debt Rate, a Borough Rate, a Watch Rate and a General District Rate to pay, and these heavy rates were laid at a time when the previous one had not been fully collected, so giving those ratepayers that had paid, further dissatisfaction with the local board.50 In a time when national income tax had been increased due to the war in the East, when food prices were up some fifty percent, and trade was slow and local families were falling into arrears, these small property ratepayers were not as able to carry the increased tax burden as easily as the town’s larger manufacturers. It is little wonder then that

47 Since Medieval times, the inhabitants of the Manor of Wakefield were required to take their corn and malt to the Soke mill on the River Calder to be ground; J. W. Walker, Wakefield: Its History and Its People: Volume II, 3rd edn (Wakefield: S. R. Publishers Ltd., 1966), pp. 519-520.
49 ‘New Town Hall: Great Meeting at the Courthouse’, WJE, 14 July 1854, p. 8; Walker, Wakefield, p. 520.
the town should object to additional taxation in the form of payment for Ranger’s survey and plans. Furthermore, the local board had bought land for a proposed new town hall that had to be paid for through the rates, and whilst the controversy over Ranger’s employment was still ongoing, the board was (unbelievably to its critics) proposing its building at a cost of between five and ten thousand pounds.52

That the ratepayers of Wakefield had grievance with the local board is clearly evident, and demonstrated in the public meeting of the 10th of July 1854.53 It was following this meeting that the council resolved that, ‘the ratepayers of the borough of Wakefield [...] in a public meeting [...] determined that the present is not for pecuniary reasons a fitting opportunity to carry out any effective sanitary improvements’.54 This would support the arguments of Millward, Wohl, and Szreter, that ratepayers were a major source of obstruction to mid-century sanitary improvement had the council’s resolution truly been the case.55 Rather, the meeting - with a record attendance of two thousand people - was actually called by the ratepayers in opposition to the corporation’s plan to build the new town hall. The ratepayers’ unanimous vote was in fact against the corporation’s intention of mortgaging the rates for that purpose, when they had ‘not yet commenced any improvements whatever’ regarding the town’s sanitary condition.56 The Act did enable the local board to mortgage the rates for the purpose of transacting its business, but a new town hall was not considered a priority; the board could very well transact its business where it had being doing so since its constitution.57 The corporation’s resolution seems in essence a petty act of revenge on the

52 WYHC, WW1/2, TCMB 1853-1857, 28 November 1853; ‘Local’, WJE, 16 December 1853, p. 5.
54 WYHC, WW1/2, TCMB 1853-1857, 19 July 1854.
part of the proponents of the new town hall (mostly Whigs and Radicals under the Liberal banner), against the towns’ people. The local ratepayers had indeed resigned themselves to the cost of sanitary improvements, confirming Hassan’s and Falkus’ view that local opinion was generally supportive of municipal sanitary enterprise, and this acceptance of a rate for sanitary improvement also supports Hennock’s view that the locality was the only place where ‘prejudice for cheap government was likely to yield’.58

In conclusion, whilst Wakefield’s local board was unanimous in its resolve that the water supply should be in public hands, it was divided on how that aim should be achieved. The resolution was in response to the threat of Cholera, and as Wohl argues, the board may have been less than enthusiastic with it being a responsive measure.59 Yet it was still undisputed, as all of the interests on the local board would have benefitted from a modernised, municipal supply; the large manufactures for example through reduced costs, and property owners and traders through increased property value and greater security from fire losses. However, the board did not adopt a unified strategy for achieving the public purchase because of its factious nature, and so substantiating Hennock’s view that the social and political composition of governing bodies are key.60 The divergent interests on the board meant that its members had varying priorities, and as Szreter argues, there could be no obvious consensus.61 The board’s small property owners (recently enfranchised by the Municipal Corporations Act) were a distinct group with interests to defend; local government finance was at this time ‘inelastic’ and relied heavily on rateable value of property, irrespective of income.62 Being more vulnerable to heavy rate burdens than the large

60 Hennock, ‘Finance’, p. 223.
manufacturers and industrialists on the board, they were bound to prefer a policy of caution and economy; this is evidenced earlier in the chapter by their determination to negotiate with the company for a better price, rather than employ Ranger at considerable cost.

The critical point where the local board should have developed a consistent and united policy was in response to the company’s offer of the 1st of November 1853. The company was willing to sell and might well have agreed to a valuation from a disinterested party. If the board was dissatisfied with the asking price (which contemporaries felt was fair, and the company on reflection thought too low), it was enabled by legislation to negotiate privately or through arbitration for a better deal. Yet instead of attempting to come to terms with the water company, the local board instructed Ranger from the General Board to value the works. Not only did this illustrate a lack of sensitivity towards the company, but the controversial appointment deepened divisions within an already factious council. Even when the company advised the local board that it would not entertain a valuation by Ranger, the board made no attempt to come to terms; those members of the board - in opposition to the Liberals - that proposed a treaty with the company, were consistently negatived in council. The company was still prepared to sell its works, and the offer was left open for four months before it was withdrawn due to lack of acceptance by the local board. Szreter’s contention that public health challenges need to be met with political resolution and not conflict, is clearly evidenced in Wakefield.

The local board was unsuccessful in its attempt to municipalise the water supply in 1853-1854 because it specifically failed to adopt a cohesive strategy in response to the water

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63 WYHC, WW1/2, TCMB 1853-1857, 9 November 1853.
64 ‘Wakefield Waterworks’, WJE, 20 January 1854, p. 5; An Act, 1848, 11 & 12 Victoria, Ch.63, p. 755.
65 WYHC, WW1/2, TCMB 1853-1857. 23 February 1854 – 19 July 1854.
company’s offer to sell; this purchase failure should also be understood as a missed opportunity to supply the town with better water. As evidenced in the local press and council minutes, the water company was willing to sell and public purchase was supported. The local board however failed to exploit the legislative powers available to it by not considering treaty or arbitration with the company. Furthermore, the local board’s resolve to mortgage the rates (as permitted in legislation) for the building of the new town hall rather than for sanitary purposes, justifies the charge that it used the powers granted to it ‘in a most arbitrary and objectionable way’.67 It can therefore be concluded that the local board was largely to blame for the failed purchase attempt of the Wakefield Waterworks Company, and contemporary criticisms of the local board were, in this respect, fair.

Chapter Three

The Water Question 1861-1862: Was the Local Board’s Opposition to the Water Company’s Bill, and its Efforts to Purchase the Water Company’s Works, Legitimate Attempts to Improve Wakefield’s Public Health?

In determining the local board’s commitment to resolving Wakefield’s water question in the early 1860s, this chapter will consider possible motivations for the corporation’s unsuccessful purchase attempt, as well as its concurrent resolution to oppose the water company’s parliamentary bill to improve its works. Hassan has maintained that the public ownership of water after mid-century occurred for reasons aside from health.1 Szreter has similarly argued that from the late 1840s until the 1870s, incentives for sanitary improvement were mostly commercial and industrial.2 Such claims are particularly relevant to nineteenth-century Wakefield, as having lost its earlier dominance within the region’s textile industry, it experienced what contemporaries viewed an ‘economic subjugation’.3 Eighteenth-century Wakefield was a leading cloth manufacturer within the West Riding, and at the height of its material prosperity.4 By the nineteenth century, its wool trade had been lost to Bradford whose population subsequently increased eight-fold in the first half of the century, compared to Wakefield’s only doubling (see Figure 3.1 page 30).

Civic rivalry was indeed a common feature across West Yorkshire’s textile belt, where economic success was crucially dependent on supplies of pure, soft water. As already demonstrated in Chapter Two, the social and political structures of local boards influenced how they shaped their policies and executed their administrative functions. It is necessary therefore to consider such structures, not only in the context of national legislation and the regulatory framework, but also in the context of the town’s perceived economic status within the regional economy. For this purpose the Local Board of Health (also constituted as the corporation and the council) should be considered as a whole and as a collective of key individual interests, with particular attention being paid to the proponents of municipalisation, and the opponents of the water company’s parliamentary bill.

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This study will support Falkus’ claim that the driving motivation for municipalisation was dissatisfaction with the exiting supply, but it will address how that supply was deemed unsatisfactory; that is, from a public health perspective or from an economic perspective. If the understanding is that public ownership would have facilitated an improvement in the town’s public health as urged by Ranger in 1852, then failed acquisition may be construed as a lost opportunity by the local board to solve the water question. Furthermore, it is reasonable to suggest that by resolving to frustrate the water company’s bill for an alternative source to the Calder, the local board was in fact depriving the town of potentially safer water, and so prioritising industrial needs over domestic. If the local board is found to be uncommitted in its purchase attempt, or economically motivated in its opposition to the water company’s bill, it may be deemed that its actions were not legitimate attempts to address the public health issue. In this context the contemporary criticism that the local board failed ‘to provide for the health and comfort of the inhabitants’ may be considered fair.

Since the local board’s failed purchase attempt of Wakefield Waterworks Company eight years previously, the town’s population had steadily grown. The industrial towns above Wakefield (situated on the Calder itself or on one its tributaries) experienced much greater expansion – see Figure 3.2 page 32 - thus conveying the sewage, chemical and dye waste, as well as the manufacturing refuse, from some four-hundred thousand inhabitants into the River Calder by the mid-1860s.

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Problematically for the water company, whilst demand for pure water was inevitably increasing for domestic, manufacturing and sanitary purposes, the source of its supply was becoming increasingly polluted. In Wakefield, when the Street Commissioners had been empowered by their Act to sewer the town in 1771, they built their syphon sewer under the Soke Mill race and emptied the town’s waste straight into the Calder. The position of the outfall had never been changed, and so still formed the main outlet for the sewage of the town. The issue for the town’s inhabitants was that in 1837 when the water company was established, it was unable to take its water above the sewage outfall as that section of the river was protected by the Soke rights. The water company had no choice therefore but to take its supply at Stanley Ferry, some two miles downstream from the point at which the town emptied its sewage into the river (see Map 3.1 page 33).

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10 See page 11, Map 1.1.
11 See page 24, footnote 49.
**Map 3.1** – Map of the Calder through Wakefield, showing the Sewer Outlet (bottom left-hand oval) and the Water Supply Inlet (upper oval).

Dissatisfaction with the water supply was clearly evident, as manifest in the witness statements to Ranger, in the local press (regardless of political persuasion), and in the corporation’s attempt to purchase the waterworks in 1853-54. The water company also acknowledged the inadequacy of its source; in the five years alone prior to municipalisation in 1877, it would spend over fifty-one thousand pounds in promoting parliamentary bills for a better supply. Thus in November 1861 ‘in deference to the prejudices of the inhabitants, and actuated by a desire to improve the quality of the water’, the water company looked to East Ardsley - an area approximately four miles north of Wakefield - for a potential new supply. The bill it was promoting (referred to as the Ardsley scheme) was not only for an extension of its works, but also for powers to increase its capital. The water company argued that it had exhausted its capacity to borrow money, and so was unable to improve the water quality by laying down filters (up to this point the company depended only on mechanical filtration through sand beds).

On hearing of the water company’s intention to promote the Ardsley scheme, the local board employed the services of an engineer named Bateman to examine and report on the proposed source. Much to the grievance of some members of the still-factious board, Bateman’s report was not published in January 1862 when it was received; these members felt that on hearing of the water company’s proposal to prosecute a bill, the local board should have met to discuss the potential insertion of any clauses they deemed necessary, and then met the company in ‘fair spirit’. Instead, the committee sat on the report for five weeks.

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14 ‘The Wakefield Water Works and the Town Council’, Wakefield Journal and Examiner (hereon referred to as WJE), 14 March 1862, p. 2; See Map 3.2 page 47.
17 West Yorkshire History Centre (hereon referred to as WYHC), WW1/3, Town Council Minute Book (hereon referred to as TCMB) 1857-1863, 4 December 1861.
before presenting it to the March council meeting, where it was resolved by over three-quarters present, to oppose the bill in Parliament.\(^\text{18}\)

It is perfectly reasonable to question the motives of those opposing the company’s bill, given its timing. In the previous October – a month before the company published its application to Parliament – the corporation had set up a committee to consider the propriety of purchasing Wakefield Gas Company and also Wakefield Waterworks Company. The corporation had been in long-standing dispute with Wakefield Gas Company regarding issues with street lighting, so it had approached the gas company for terms of sale. When the gas company replied that it had no powers to sell, the corporation turned its attention to Wakefield Waterworks Company, and Councillor Stonehouse – a worsted manufacturer and significant employer – recommended that negotiations with the water company be entered into as soon as possible.\(^\text{19}\) The water company’s response that it was ‘not in the market’ appears to have disgruntled certain members of the corporation – specifically those who would go on to oppose the company’s bill.\(^\text{20}\) It is plausible to suggest then, that these members were perhaps more personally motivated in frustrating the water company’s bill, and were not overly driven by public interest. The difference in 1861 as opposed to 1854 was that the company did not want to sell and had no need to; it was not in breach of any supply-agreement with the local board, and moreover, it was profitable.\(^\text{21}\) Also, it acknowledged that its future profitability relied on public satisfaction with the water supply, and by proposing to submit a bill to improve its works, it was in essence responding to local public pressure.

Falkus argues that public opinion was an effective weapon, wielded by some corporations

\(^{18}\) ‘The New Waterworks Scheme’, \textit{WJE}, 7 March 1862, p. 3; WYHC, WW1/3, TCMB 1857-1863, 5 March 1862.  
\(^{19}\) 1861 England Census <www.ancestry.co.uk/imageviewer/collections/8767> [accessed 02 December 2020] WYHC, WWC11/1, Gas and Water Committee Book 1861-1862, 19 October 1861.  
\(^{21}\) \textit{Third Report}, p. 31.
against calcitrant utility companies.\textsuperscript{22} That the water company was proposing a bill to ameliorate public opinion (if only to safe-guard its future profitability), is supportive of Falkus’ appraisal of the strength of local attitudes.

The water company, though responding that it was not currently in the market, did however state that it would take to its directors, any definite offer the corporation proposed.\textsuperscript{23} This should have proved encouraging to the council as section fifty-three of the Local Government Act (1858) stated that local boards could ‘absolutely’ purchase waterworks, on agreement of three-fifths of its shareholders.\textsuperscript{24} Previously, a larger if not total majority would have been requisite, and the local board was still not enabled by any parliamentary legislation to compulsory purchase the water company. In the event, and much like the 1853-1854 purchase attempt, the corporation and the water company wrangled over subsequent weeks. These endeavours proved fruitless despite local tory and liberal opinion being in favour of public ownership, and as in Chapter Two, this supports Szreter’s argument for the importance of political will in effecting sanitary policy.\textsuperscript{25}

With negotiations for the purchase of the water company having petered out by the end of 1861, the local board turned its attention to the water company’s bill. One of the most enthusiastic opponents of the bill was Councillor Lee, a worsted manufacturer, representing a family concern that employed two-hundred and thirty-five people.\textsuperscript{26} Lee stated in council that ‘the question of […] water is vital to life’ and their members were the ‘guardians of the

\begin{footnotesize}
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\item\textsuperscript{22} Falkus, ‘Development’, p. 152.
\item\textsuperscript{23} ‘Water’, \textit{WE}, 8 March 1862, p. 6.
\item\textsuperscript{26} 1861 England Census <https://www.ancestry.co.uk/imageviewer/collections/8767> [accessed 31 October 2020]
\end{itemize}
\end{footnotesize}
health of the town’. Another Liberal councillor opposing the bill was Dr Holdsworth who had tested the proposed new supply. Holdsworth suggested that for health purposes, it was not desirable to supply the town with water charged with the levels of salts and iron as found in his sample. Holdsworth’s opinion may have been influential given his medical background, though contemporaries were not insensible to the fact that ‘scientific evidence may be got up to suit either side’. Moreover, four years later in giving evidence to the commissioners investigating the state of the River Calder, the Town Clerk would justify the local board’s opposition to the bill, by stating that the Ardsley water ‘was not fit for human consumption’.

The above testaments might suggest that the council was largely motivated by public-health concerns in its attempt to block the water company’s bill, therefore contradicting Szreter’s and Hassan’s arguments that municipal endeavours in the water question were not sanitary-motivated. However, Ardsley was the same area that the water company had initially intended to take its supply from when it was first established in 1837, yet objections were not made at that time due to the quality of the water; rather the company’s plans were frustrated by local, powerful, landowning coal proprietors, who feared their collieries might flood. Furthermore, Bateman and Holdsworth had found the Ardsley water to be hard and deemed it unsuitable for drinking purposes, yet the debate respecting the advantages and disadvantages of hard water for sanitary purposes was still ongoing. Bateman was a known ‘advocate of soft water’ whereas Hawkesley (Bateman’s peer and a contemporary authority

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27 ‘Water’, WE, 8 March 1862, p. 6.
28 ‘Water’, WE, 8 March 1862, p. 6.
29 ‘Meeting on the Water Supply Question’, WFP, 15th March 1862, p. 3.
30 Third Report, p. 4.
32 ‘The Water Works Company and the Corporation’, WJE, 28 March 1862, p. 3.
on water-supply) viewed moderately hard water as best for dietary purposes. The only certainty regarding hard water was that it did not suit the textile industry – as evidenced by textile towns seeking soft water supplies. Nonetheless, Browne could still argue almost two decades later that ‘the question of hard or soft water, as a sanitary question, cannot be satisfactorily answered one way or the other at the present time’. In fact, the sanitary argument is not overly-convincing for Wakefield in 1862, despite national public-health debate being in full swing, else the board should have considered sewering in conjunction with the water supply. Radcliffe’s mortality returns (Figure 3.3) showed that the rate of mortality had actually decreased in the period 1853-1862, suggesting that the town was in a comparatively healthier state than it had been when it adopted the Public Health Act.

**Figure 3.3 Mortality Rates in the Township of Wakefield, 1853 to 1866.**

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34 *Browne*, p. 62.
35 Public health legislation was prolific between 1848 and 1875, and in the scope of this study alone included Acts for Nuisance Removal, Vaccination, Burial, Food and Drugs, Model Lodging Houses, the Local Government Act of 1858 and the Sanitary Act of 1866; Szreter, ‘Economic’, p. 708.
The opponents of the bill raised public health concerns about the water company’s proposed source, whilst also appealing to the anxieties of local taxpayers. Wakefield’s local board in the early 1860s - though including professionals and large manufacturers such as the Lee family - was still very much dominated by shopkeepers, inn keepers, tradesmen and craftsmen, all representing the town’s small-property ratepayers. The board argued that ‘our interests are your interests’ and Holdsworth reiterated that by not opposing the Ardsley scheme, the corporation would be ‘neglect[ing] their duties and the interests of the ratepayers’. As demonstrated in the previous chapter, taxation was a contentious issue for those subject to it; the amount of rates levied by the corporation in 1862 had increased by over two-hundred and seventy-six percent since it adopted the Public Health Act in 1853. Furthermore, the water company’s bill preceded the fiscal reforms of 1862-1866 that created the office of Auditor General, so taxpayers had little faith that their money would not actually be wasted. It was also generally understood that local boards would at some point be obliged to take over their town’s water supplies, and so the bill’s opponents warned against further rate rises. Lee argued in council that the water company’s present scheme (the Calder) was a bad one, as was the proposed Ardsley scheme; in allowing the bill to pass therefore, the local board would be obliging Wakefield’s ratepayers to pay for two bad schemes, whilst also having to ultimately pay for a third. However, in the event of any inevitable purchase of the water company’s works, the council would in theory only have to pay what they were actually worth, not what had been expended on them. Moreover, Bateman had advised that the Ardsley water was probably the best the town could obtain

36 WYHC, WW1/3, TCMB 1857-1863.
37 ‘Water’, WE, 8 March 1862, p. 6.
41 ‘Water’, WE, 8 March 1862, p. 6.
42 ‘The Waterworks New Scheme’, WJE, 7 March 1862, p. 3.
within the coal measures, without going further afield and to a much greater expense – a fact confirmed by a civil and mining engineer giving evidence in 1866.\textsuperscript{43} Therefore, just as the sanitary argument against the Ardsley scheme is not overly-convincing, neither is the pecuniary.

A more satisfactory explanation of the council’s opposition to the bill is that relating to Wakefield’s economy, especially when considering nineteenth-century Wakefield within its regional industrial network. In the sixteenth century, Wakefield had been one of the most prosperous textile towns, and with the completion of the Calder Navigation in the seventeenth century it had become the chief wool market in the region too. During the eighteenth century, worsted manufacture replaced the town’s original broadcloth manufacture, and Wakefield’s eighteenth-century prosperity was subsequently built on it worsted industry (its Tammy Hall – built in 1766 for the trading of worsted cloth – was the first to be built in all of West Yorkshire’s textile towns). From the mid eighteenth century however, the local aristocracy (those that had already made their fortunes from land and wool) became increasingly authoritarian.\textsuperscript{44} Contemporaries complained of how they ‘refused to permit mills or factories to be established’ at the time when ‘manufacturers began to excite considerable interest in the West Riding’.\textsuperscript{45} Furthermore, clauses were inserted into indentures of apprenticeship, forbidding those apprenticed from subsequently operating within a ten-mile radius of Wakefield. As Leeds was only seven miles away and so within the limit, this pushed manufacturers to Bradford whose prosperity and population increased, to the detriment of Wakefield.\textsuperscript{46}

\textsuperscript{43} Town’s Meeting On The Water Question’, \textit{WJE}, 14 March 1862, p. 3; \textit{Third Report}, p. 48.
\textsuperscript{46} Camidge, \textit{History}, p. 8.
Other textile towns were growing rapidly in the nineteenth century and their success was crucially dependent upon a supply of pure, soft water. Whilst the implications of hard water were in dispute for sanitary purposes, they were not for trade. Hard water caused lime-scale on machinery that necessitated extra maintenance and extra costs. Moreover, hard water wasted soap, and so because of the various washing processes involved in cloth manufacture, hard water was not conducive to profitable textile enterprise. In order for Wakefield to have ‘arisen from her slumber and reasserted her claim to that ancient title’, the town quite simply needed a pure, soft water supply. As the Town Clerk would later urge to the Local Government Board, with a hard water supply Wakefield’s industry ‘will be greatly paralysed’. The Ardsley scheme would have bought hard water to the town, and although Wakefield Waterworks Company was endeavouring to address the inadequacy of the Calder as its source, this was not perceived as a solution by the likes of Lee and Stonehouse on the local board; rather it was a threat to their worsted manufacturing, and detrimental to any future economic success of Wakefield within its regional network. In 1864 the woollen and worsted industry of Great Britain had an estimated worth of nearly sixty-five and a half million pounds, with half to two-thirds of that industry being carried on in the West Riding. It is unsurprising then that the local press would warn that with a hard water supply ‘not only will this generation, but all future ones, labour under disadvantages that we can scarcely conceive.’

Councillor Lee would go on to oppose all of the water company’s subsequent parliamentary bills as they were all for obtaining hard water supplies (though that is not to suggest that the company was deliberating sourcing hard water). Furthermore, Lee was

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47 Camidge, History, p. 4.
48 The National Archives, MH12/15583, Wakefield Town Clerk to Local Government Board, 13 April 1876.
49 Third Report, p. xvii.
50 ‘Further Opposition to the Wakefield Waterworks Bill’, WE, 3 June 1876, p. 5.
instrumental in the founding of the short-lived Wakefield New Water Company, established in 1873 in direct opposition to the original company, and with the aim of securing soft water from the River Don in 1874.\textsuperscript{51} That the corporation would pay two-hundred and ten thousand pounds in 1877 (over thirty percent more than it had anticipated) for the Wakefield Waterworks Company, at the precise moment when the water company finally had a bill pass (and which secured a hard water supply), demonstrates the importance of a soft water supply to the town.\textsuperscript{52} A further example is that in 1882 industry and trade accounted for 42.8\% of Wakefield’s water capacity.\textsuperscript{53} These facts are clear evidence, and substantiate Hassan’s and Hamlin’s arguments, that increased trade prospects were powerful incentives for municipal sanitary enterprise.\textsuperscript{54}

Whilst opposing the company’s bill in March 1862, the local board was again looking to purchase the water company, though as in 1853-54, it had no clear and unified approach. The council was split between those that wanted to oppose the company and buy their works, those that wanted to oppose the company and not purchase, those that supported the company’s bill and wanted to purchase the company, and those that supported the company and not want public purchase. The advocates of municipalisation in 1862 comprised of professionals, trades and craftsmen, and manufacturers including Stonehouse and Lee. This is supportive of Hassan’s and Millward’s claims that it was clearly in the interest of the professional and commercial classes to support municipal endeavour, as a public supply of water had many anticipated benefits including reduced fire losses, healthier workforces and

\textsuperscript{51} Kate Taylor, \textit{The Making of Wakefield} (Barnsley: Wharncliffe Books, 2008), p. 58.
\textsuperscript{52} Hamlin, ‘Muddling’, p. 70.
\textsuperscript{53} Hassan, ‘Growth’, p. 542.
preferential water rates. Yet these advocates still had to win the support of ratepayers at a town meeting at the end of March. Arguments for the purchase of the water company included those for sanitary purposes and for improving the town’s public health; the water company was even charged with monopolistic abuse for obliging the town to take dirty water. Other arguments for public ownership appealed to civic pride in the context of civic rivalry. The townspeople were warned that ‘this was an age of progress’ and that Wakefield ‘unless it purchased the waterworks would be lagging in the rear’. Waterworks schemes were symbolic of Victorian ambition and achievement, and as Wohl argues, ‘towns closely watched one another’. Figure 3.4 (page 44) shows the exponential growth of municipal acquisition during this period, and with neighbouring Leeds and Bradford Corporations having already bought their waterworks almost a decade earlier, it is little wonder that Wakefield – whose contemporaries felt the town was perceived as ‘slow, stupid and dirty with grass growing in its neglected streets’ - felt the pressure. Nonetheless, as persuasive as the sanitary and civic arguments were (and certainly they were relevant), there was little hiding the economic incentive. Wakefield’s ratepayers at least seemed unconvinced, and at a public meeting held on the 24th of March 1862, they voted by ninety percent that it was inexpedient to purchase the water company. The corporation subsequently withdrew its opposition to the bill as the company dropped it, going only for a money bill which was passed on the 30th of June 1862. Section thirty-nine included the express clause that the company should continue to take water from the Calder.

56 ‘The Water’, WJE, 28 March 1862, p. 3.
57 ‘The Water’, WJE, 28 March 1862, p. 3.
59 McTominey, ‘Bad Neighbours?’, pp. 27-28; Camidge, History, p. 5.
60 ‘The Water’, WJE, 28 March 1862, p. 3.
61 Wakefield Waterworks Act, 1862, 25 & 26 Victoria, Ch.99.
62 Third Report, p. 5.
In conclusion, the local board’s attempt to block the water company’s bill in 1862 cannot be convincingly justified on public health grounds. The company as well as the local board had had the Ardsley water tested prior to giving notice, and would likely only go to the expense of prosecuting a bill if the proposed source was viable in terms of quality.\(^63\) Those objecting to the scheme also argued that the quantity was deficient, yet this should not have proved an issue; the water company had assured the local board that it was to maintain the present Calder scheme, and run it in conjunction with the new one until it could be sure the Ardsley scheme was sufficient.\(^64\) Furthermore, Bateman (on behalf of the council) and Childes, an engineer giving evidence to the River Commissioners in 1866, both agreed that a better supply of water could probably not be obtained within the immediate area; Bateman had even gone as far as recommend that the local board should not oppose the bill at that

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\(^63\) ‘Water’, *WE*, 8 March 1862, p. 6
\(^64\) ‘Water’, *WE*, 8 March 1862, p. 6.
time. However, the bill’s opponents said the water was hard and unfit for sanitation and dietetic purposes, despite the lacking of any consensus in 1862 that that was actually the case. What was undisputed however, was that a hard water supply was wholly unsuitable for a textile town. The Ardsley scheme would have brought hard water to Wakefield and therefore placed the town’s worsted industry at a great disadvantage compared to other textile centres who were obtaining soft water supplies.

With regards to the corporation’s purchase attempt, Hassan argues that public ownership would have brought benefits to the town’s industrialists, including greater output, lower costs and reduced fire risks. A public supply was perceived as a modern supply, and no doubt would have elevated the town’s economic status, so attracting new businesses, and raising the profiles of existing ones. Szreter likewise argues that the prospect of commercial advantage spurred individuals to sanction municipal enterprise. It might also be feasible to suggest then, that the prospect of commercial disadvantage spurred municipal enterprise too. After all, it can hardly be a coincidence that a leading supporter of public purchase and objector to the bill was Henry Lee – Liberal councillor for thirty years, three times Mayor, and significantly for this study, an influential worsted manufacturer.

That is not to say however, that the local board lacked members who were primarily motivated by a desire to improve Wakefield’s public health, such as Dr Holdsworth. Similarly, those manufacturers on the board who were obviously commercially motivated were not necessarily without a sanitary conscience; Councillor Lee was also in fact a

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65 See page 40, footnote 43.
68 Taylor, Making, p. 8.
promoter of the Model Lodging House. Nonetheless, it is clearly evident from the contemporary literature, the conservative and liberal local press, as well as the council minutes and witness testimony to the River Commissioners, that the local board’s opposition to the water company’s bill, and its concurrent purchase attempt of the company, are best understood in economic terms. The local board was clearly commercially motivated and consequently ‘failed to provide for the health and comfort of the inhabitants’. In this respect the local board’s management of the water question cannot be credibly interpreted as a legitimate attempt to improve Wakefield’s public health, and therefore contemporary criticisms of the local board were fair.

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Map 3.2 – Map Showing the Ardsley Scheme. The blue lines represent approximate position of the three proposed reservoirs, and the orange lines correspond to aqueducts. The blue circle represents the water company’s existing works. Closure of the archive office means it is not possible to access plans for the scheme, so the approximations are taken from the local press.

Chapter Four

Conclusion

Ranger’s report of 1852 paid particular attention to Wakefield’s water supply, with local inhabitants bearing witness to the Calder’s filthy condition, and the state of the water as delivered to them. The Calder was also investigated by the River Commissioners in 1866 as part of a central-government inquiry into river pollution, with local and national witnesses contributing to its findings. By the time of Radcliffe’s visit in 1869 therefore, there was little doubt that the River Calder was wholly unsuitable as a water supply for the local population, yet it still remained the town’s source despite being recognised as ‘one of the elements in producing an unnecessarily high mortality’.¹ The publication of Radcliffe’s sanitary report in 1869 prompted criticisms of Wakefield’s Local Board of Health from Radcliffe himself and the medical press, with The British Medical Journal declaring it ‘scarcely possible to believe that there could be found another town in the kingdom where the local board had so neglected the duties imposed upon it by the legislature’.² The Medical Times and Gazette accused the board of using ‘the powers granted to them in a most arbitrary and objectionable way’ and also having ‘never tried to surmount’ the difficulties it faced in its sanitary administration.³ This study has sought to determine whether, in the context of the town’s water supply, these accusations were in fact fair, and in doing so, it has necessarily had to include two caveats.

³ ‘The Sanitary Condition of Wakefield’, The Medical Times and Gazette, 1 (1870), pp. 36-37
The first caveat relates to Chapter Two, and that is, a municipal supply was an improved supply as argued by Millward and Falkus. The failure of the local board to purchase Wakefield Waterworks Company in 1852-53 should thus be considered as a missed opportunity to improve the water supply of the town. For that reason Chapter Two questioned how far the board was to blame for that failure, and found that it was to a significant degree. The evidence presented in the chapter showed that the greatest obstacle to municipalisation was in fact the local board itself. As demonstrated by the local press and council minutes, the divergent social and political interests represented on the local board meant that it failed to adopt a cohesive strategy in response to the water company’s offer to sell their works in November 1853. This is frustrating for a number of reasons, not least because the local board was unanimous in its resolve that the water supply should be in public hands. However, the board was divided on how the public purchase should be achieved, and the contentious appointment of Ranger to value the company’s works demonstrated, not only gross insensitivity towards the water company and the factious nature of the local board, but also the need for political will in delivering successful public-health solutions.

The Wakefield Local Board of Health was criticised for using the powers granted to it ‘in a most arbitrary way’, and certainly the board’s conduct during the purchase attempt of 1853-54 justifies this criticism; its resolve to mortgage the rates for the purpose of a new town hall is evidence of this. Yet with regards to legislation, it must be remembered that at no point during the nineteenth century were local boards enabled to compulsory purchase

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5 See page 27.
water companies. Moreover, whilst the number of municipal corporations adopting water supplies was undoubtedly increasing during the first half of the nineteenth century, it was not until the last quarter of the century that municipalisation was firmly established. However, as Hassan argues and the local press evidence shows, municipal acquisition was in fact supported. Furthermore, Wakefield Waterworks Company was willing to sell. The evidence presented by the local press and the council minutes clearly demonstrate that the corporation had ample opportunities to attempt to come to terms with the water company for successful acquisition, and if private negotiations for an agreeable purchase price had proved to be unsuccessful, the local board was enabled by the Public Health Act to negotiate by arbitration through the General Board of Health. That is not to say of course that municipalisation would have been inevitable in 1854 had both parties gone to arbitration, but the point remains that the local board failed to exploit this legislative option, and despite all the local determinants being in favour of municipalisation, the water supply remained in private hands.

The second caveat relates to Chapter Three (though decreasingly an issue as the century progressed and public health became further centralised). The understanding here is that it was the local authority’s responsibility (rather than the individual’s) to ensure the health of the town, and of the people. Chapter Three therefore supposed that the local board had an obligation to ensure safe water for the town’s population, and by attempting to block the Ardsley scheme, the local board was potentially depriving the town of purer water. In this respect, the chapter questioned whether the local board’s opposition to the water company’s bill, and its concurrent purchase attempt, were legitimate attempts to improve the town’s

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8 See page 17.
public health, by considering the corporation’s motivations in doing so. By finding that the local board was largely motivated by commercial concerns rather than sanitary concerns in opposing the Ardsley scheme, the chapter concluded that the local board’s actions were not legitimate attempts to improve Wakefield’s public health.

Wakefield Waterworks Company was attempting to improve its supply by looking to Ardsley as an alternative source, and by improving its existing works at Stanley Ferry. The evidence presented in the local press showed that the company had had the Ardsley water tested and felt justified in promoting the bill; it was even willing to maintain the Calder scheme until the Ardsley scheme proved sufficient. The same evidence, along with the council minutes, showed that the board was opposed to the water company’s efforts, and justified its opposition by reporting that the proposed source was deficient in quality and quantity, despite the company’s assurances. Moreover, the engineer employed by the local board to test the Ardsley water had advised it not to oppose the company’s bill, because a better supply was likely to be lacking within the confines of the coalfields.

Critically, Bateman had reported to the local board that the Ardsley water was hard, and Wakefield being a textile town needed soft water to thrive. Wakefield was felt to have been ‘going down in the world’ and ‘outstripped by her neighbours’, and contemporary literature and local press reports testify to the town’s struggle to reconcile its current economic position, with that of its past. The Ardsley scheme would have brought hard water to Wakefield and placed the town’s worsted industry at great detriment at a time when other

11 ‘The Water Question’, *Wakefield Express*, 8 March 1862, p. 6
12 See page 40, footnote 43.
textile centres were already obtaining soft water supplies. Significantly, the greatest opponent of the company’s bill - and proponent of municipalisation - was the influential worsted manufacturer Councillor Lee. The evidence presented in this chapter confirms Szreter’s view, and leads to the conclusion that Wakefield’s local board was to a great extent commercially motivated in its management of the water question in 1861-62. As such, the board’s actions cannot be plausibly interpreted as legitimate attempts to improve Wakefield’s public health; that the town was condemned to continue taking water from such an objectionable source justifies the charges levied against the local board, that it failed ‘to provide for the health and comfort of the inhabitants’.

This study finds that contemporary criticisms against the local board were fair, but in doing so, it also offers some defence. Wakefield was not the only town being investigated at this time as many industrial towns were being rendered insanitary because of the pressures of increased urbanisation; one only has to consider the plethora of sanitary reports and commissions following that of Chadwick’s. In 1869, Wakefield was just one of forty one towns identified by the Privy Council because of ‘questions of common sanitary administration’, with twenty being subsequently inspected. Similarly, the Calder was not the only heavily polluted river in the region, with the River Aire being concurrently investigated, and other rivers around the country likewise.

Attention must also be paid to time period. Local boards were not mandated until the Public Health Act of 1875 to provide ‘proper and sufficient’ water, and again, no legislation

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16 See page 14, footnote 7.
17 Twelfth Report Of The Medical Officer Of the Privy Council With Appendix, PP. 1870, Cmd.208, p. 15.
18 For example the Thames in 1866, and the Mersey and Ribble rivers in 1868.
was ever passed in the nineteenth century permitting local boards to compulsory purchase waterworks.\textsuperscript{19} Public-health legislation during the scope of this study was voluntary, complex and confusing, leaving plenty of opportunity for misinterpretation and avoidance. Furthermore, there was no general, unequivocal consensus that councils should endeavour in municipalisate enterprise; some felt that rather than take-up councillors’ time and detract from their other duties, utility management should be left to the more experienced and competent private sector.\textsuperscript{20} The argument against the appropriateness of corporations engaging in municipal enterprise is strengthened by the fact that at mid-century certainly, local government finance was constricted and private enterprise had greater capabilities for borrowing finance, as argued in Chapter Two.\textsuperscript{21} Moreover, it must also be remembered that public-health expenditure was just one demand on local authorities who were facing other rising costs such as policing and poor relief. Nonetheless as evidenced in Chapters Two and Three, political factiousness and economic motivations inherent in the local board resulted in failure to improve Wakefield’s water supply during this period, leading to the conclusion that contemporary criticisms of the local board of health were fair.

In finding the above conclusion, this study also suggests further opportunities for research. When the local archives reopen in the future, it might be possible to access records for Wakefield Waterworks Company, so allowing for more balance when considering its agency in the water question. These records might also include a shareholder register which would allow identification of any councillors that were in fact shareholders during the scope of this study, and so offer further understanding of their actions. The re-opening of the

\textsuperscript{19} Public Health Act, 1875, 38 & 39 Victoria, Ch.55.
\textsuperscript{21} See pages 26-27.
archives will also allow access to other committee books of the town council (such as the General Works Committee which later incorporated the Board of Works, Sewering, and Sanitary Committees) so allowing investigation into further areas of concern in Ranger’s and Radcliffe’s sanitary reports. This is especially appealing as some of the most scathing criticisms of the local board were in relation to its nuisance removal policy. The board was said to have made no public provision for the removal and disposal of excrementitious matter, and was ‘vexatious’ in compelling a householder to do so.22 Indeed the British Medical Journal alleged that the local board had ‘actually framed regulations which have for their effect the prevention of the removal of such refuse’.23 Certainly this charge is worthy of further study.

Aside from other aspects of Wakefield’s sanitary reports being examined, one might consider concentrating on a later time period. This research option offers several advantages, the main one being that public health legislation after the 1875 Act was compulsory. This is especially pertinent for the water question as it is only by this Act that local authorities were obliged, rather than permitted, to provide a sufficient water supply.24 A study after 1875 would therefore mitigate one of the main defences of the local board as offered above, and so permit a more critical evaluation of the local board’s conduct. A further advantage of considering a later period is that, although the local board appointed its first Medical Officer of Health in 1866, the reports only survive in the local archives from the 1890s. If one was to ask how far contemporary criticisms of the local board were fair with regard to housing conditions, nuisance removal or the state of the drainage at the end of the century for example, these reports would prove invaluable. Furthermore, in addressing the research

24 See page 17.
question for the last quarter of the century, one might also take into account the impact of increased technical and medical knowledge; the advent of Bacteriology and the growing understanding of its relationship with disease would be an interesting consideration for example. Finally, the studying of a later time period, such as after female enfranchisement (local and national), would allow consideration to be made of the agency of women, and their role and impact on public health outside of the voluntary sector. This area of study is somewhat lacking, and would benefit from further and much-welcome research.
Bibliography

Primary Sources

Manuscripts

West Yorkshire History Centre
P8/246       Public Health Act (Wakefield) 1853
QD4/1/10     Quarter Session Records of the West Riding/Local Legislation
WW1-3        Wakefield Corporation and County Borough Council Minutes (1848-1863)
WWC4         Wakefield Corporation Parliamentary Committee Minutes
WWC11        Wakefield Corporation Gas and Water Committee Minutes
WWD          Wakefield Corporation and County Borough Departments
WYW          Acts of Parliament, Pontefract, Darrington and Wakefield

The National Archives
MH12        Correspondence of the Local Government Board and Predecessors with Poor Law Unions and other Local Authorities.
MH13        Correspondence of the General Board of Health and the Home Office's Local Government Act Office with Local Authorities and Government Departments

Wakefield Local Studies Library
Baines, Edward, History, Directory and Gazetteer of the County of York (Leeds: Baines, 1822)

Wakefield Corporation Municipal Year Books 1854-1863

White, William, Directory and Topography of the Borough of Leeds, Halifax, Huddersfield and Wakefield (Sheffield: Robert Leader, 1858)

**Government Sources**

**Commissions and Inquiries - Rivers**


*Fifth Report Of The Commissioners Appointed In 1868 To Inquire The Best Means Of Preventing The Pollution Of Rivers, Pollution From Mining Operation and Metal Manufacturers, Vol. I: Report, Maps; Vol. II Minutes of Evidence*, PP. 1874, Cmd.951

*Sixth Report Of The Commissioners Appointed In 1868 To Inquire The Best Means Of Preventing The Pollution Of Rivers, The Domestic Water Supply Of Great Britain*, PP. 1874, Cmd.1112

**Commissions and Inquiries – Reports of the Medical Officer**

*First Report Of The Medical Officer Of The Privy Council With Appendix*, 1858, PP. 1859, Cmd.2512

*Second Report Of The Medical Officer Of The Privy Council With Appendix*, 1859, PP. 1860, Cmd.2736

*Third Report Of The Medical Officer Of The Privy Council With Appendix*, PP. 1861 (161)

*Fourth Report Of The Medical Officer Of The Privy Council With Appendix*, PP. 1862 (179)

*Fifth Report Of The Medical Officer Of The Privy Council With Appendix*, PP. 1863 (161)

*Sixth Report Of The Medical Officer Of The Privy Council With Appendix*, PP. 1864, Cmd.3416

*Seventh Report Of The Medical Officer Of The Privy Council With Appendix*, PP. 1865, Cmd.3484

*Eighth Report Of The Medical Officer Of The Privy Council With Appendix*, PP. 1866, Cmd.3645
Ninth Report Of The Medical Officer Of The Privy Council With Appendix, PP. 1867, Cmd.3949

Tenth Report Of The Medical Officer Of The Privy Council With Appendix, PP. 1867-68, Cmd.4004

Eleventh Report Of The Medical Officer Of The Privy Council With Appendix, PP. 1868-69, Cmd.4127

Twelfth Report Of The Medical Officer Of the Privy Council With Appendix, PP. 1870, Cmd.208

Miscellaneous
Return of Expenses incurred by Railway, Gas and Water Companies in Promoting or Opposing Bills Before Parliament 1872-82, PP. 1883 (299)

Return of Number of Private Bills Introduced and Brought from House of Lords and of Acts Passed in Session 1862, PP. 1862 (0.98)


First Report Of The Commissioners For Inquiring Into The State Of Large Towns And Populous Districts, PP. 1844, Cmd.572

Second Report Of The Commissioners For Inquiring Into The State Of Large Towns And Populous Districts: Together with Minutes of Evidence, Appendix and Maps, PP. 1845, Cmds.602,610


Newspapers
The Barnsley Chronicle
The Bell’s Weekly Messenger
The Leeds Intelligencer
The Leeds Mercury
The Leeds Times
The Manchester Guardian

The Morning Post

The Observer

The Public Ledger and Daily Advertiser

The Sheffield Daily Telegraph

The Sheffield Independent

The Times

The Wakefield Express

The Wakefield Journal & Examiner

The Wakefield Free Press

The Yorkshire Gazette

The Yorkshire Post and Leeds Intelligencer

Other Printed Sources

Public Health

The British Medical Journal

The Builder

The Ironmonger

The London Review of Politics, Society, Literature, Art, and Science

The Medical Times and Gazette

The Lancet

Transactions of the Sanitary Institute of Great Britain

Maps

Ordinance Survey Map, 1854, Yorkshire 233 <https://maps.nls.uk/view/102345004> [accessed November 2020]

Books


Crowther, George Henry, A Descriptive History of the Wakefield Battles and a Short Account of This Ancient and Important Town (Wakefield: McInnes, 1886; repr. 2011)


James, John, *History of the Worsted Manufacture in England from the Earliest Times, with Introductory Notices of the Manufacture Among the Ancient Nations, and During the Middle Ages* (London: Longman, Brown, Green, Longmans and Roberts, 1854)


Meymott Tidy, Dr C., *The Treatment of Sewage* (New York: D. Van Nostrand, 1887)


Smith, Lucy Toulmin, *The Itinerary of John Leland in or About the Years 1535-1543* (London: G. Bell and Sons, 1910)


Tyas, George, *The Battles of Wakefield: An Historical Narrative of the Battle of Wakefield in 1460 and also an Account of the Engagement on Wakefield Green in 1643, with Antiquarian, Topographical and Local Remarks* (Wakefield: George Tyas, 1854; repr. 2011)

Wright, T. G., *Cholera in the Asylum: Reports on the Origin and Progress of Pestilential Cholera in the West Yorkshire Lunatic Asylum During the Autumn of 1849, and on the Previous State of the Institution* (London: Longman, Brown, Green, and Longmans, 1850)

HathiTrust EBook <https://babel.hathitrust.org/cgi/pt?id=uc1.31378008359385> [accessed October 2020]

---

**Secondary Sources**

**Books**


Fraser, Derek, ed., *Municipal Reform and the Industrial City: Themes in Urban History* (Leicester: Leicester University Press, 1982)

Fraser, Derek, *Power and Authority in the Victorian City* (Oxford: Basil Blackwell, 1979)


Morris, R. J., *Class, Power and Social Structure in British Nineteenth Century Towns* (Leicester: Leicester University Press, 1986)


Rochford, Michael J., *Wakefield Then and Now: Extraordinary Tales from the Merrie City* (Barnsley: Pen and Sword History, 2016)


Schott, Dieter, and others, eds, *Resources of the City: Contributions to an Environmental History of Modern Europe* (Abingdon: Routledge, 2016)


Taylor, Kate, ed., *Aspects of Wakefield 3: Discovering Local History* (Barnsley: Wharncliffe Books, 2001)

Taylor, Kate, ed., *Aspects of Wakefield 2: Discovering Local History* (Barnsley: Wharncliffe Books, 1999)


**Journals**

*Albion: A Quarterly Journal Concerned With British Studies*
Business History

Continuity and Change

Economica

International Journal of Regional and Local History

Journal of Historical Geography

Journal of Legal Studies

Journal of the Royal Sanitary Institute

Journal of the Society of Arts

Medical History

Past and Present

Population and Development Review

Proceedings of the Institution of Civil Engineers – Engineering History and Heritage

Public Health

Social History

Social History of Medicine

The British Medical Journal

The Economic History Review

The Historical Journal

The Historical Society of Lancashire and Cheshire

The History of the Family

The Lancet

The Local Historian

The Northern History Journal

The Royal Agricultural Society of England

The Town Planning Review
The Wakefield Historical Journal

Transactions of the Institute of British Geographers

Transactions of the National Association for the Promotion of Social Sciences

Urban History

Urban History Yearbook

Victorian Literature and Culture

Victorian Studies

Water History

Journal Articles


Gibson, Thomas, ‘The Public Health: A Retrospect and a Prospect’, Public Health, Vol. 28 (1915), 152-159


Harrison, J. F., ‘The Typhoid Epidemic at Wakefield Prison, 1874-75; A Little Local Incident?’, *Northern History*, 41:2 (2004), 357-376


Spar, Deborah and Bebenek Krzysztof, ‘To the Tap: Public Versus Private Water Provision at the Turn of the Twentieth Century’, *Business History Review*, 83 (2009), 675-702


**Theses**

Held at Brotherton Library, University of Leeds


**Websites**

Academia <https://www.academia.edu> [accessed December 2020]

American Council of Learned Societies Humanities EBook <https://www.humanitiesebook.org> [accessed September 2020]

Ancestry <https://www.ancestry.co.uk> [accessed November 2020]


British Newspaper Archive <https://www.britishnewspaperarchive.co.uk> [accessed November 2020]


HathiTrust Digital Library <https://www.hathitrust.org> [accessed October 2020]

History Pin <https://www.historypin.org> [accesses June 2020]


Twixt Aire and Calder <https://www.twixtaireandcalder.org.uk> [accessed November 2020]


Vision of Britain <https://www.visionofbritain.org.uk> [accessed November 2020]

Wellcome Collection <https://wellcomecollection.org> [accessed August 2020]

**Miscellaneous**

