Appendix D – Engagement with boat owners

1. Introduction

Additional engagement was conducted with residents living in permanent residential moored vessels (hereafter referred to as "boats") to assess potential issues related to their inclusion in proposed changes to the Smoke Control Area (SCA). The aim was to understand the potential impact these changes would have on boat residents. A survey was distributed via digital newsletter. The aim was to gain a general understanding of boaters' circumstances, including fuel use, financial status, and vulnerabilities. Survey results were indicative but inconclusive, necessitating follow-up interviews. A focus group was also planned but cancelled due to insufficient participation.

The interviews provided deeper insights into the challenges boaters face and their capacity to adapt to SCA regulations. Many participants expressed concern about smoke and its health impacts, with one stating: "If I was sitting next to a woman whose little child had asthma and had been hospitalised because of air pollution, no brainer isn't it." Several also described personal efforts to reduce emissions. Nonetheless, most felt the proposed rules would disproportionately affect their lives and wellbeing relative to the public health benefits. Based on the interviews and further research, we recommend against including boaters in the SCA.

There are 70 permanent mooring licenses within the Cambridge City Council. There were 31 responses to the survey sent out to the boaters, giving a response rate of 44%. Eight interviews were conducted. While the interview sample is not representative of all Cambridge boaters—due to reliance on email communication and voluntary participation—it offers valuable insights into potential issues and overlooked considerations.

2. Costs

Many boaters choose this lifestyle for financial reasons. With high rents and property prices in Cambridge, living on a boat offers an alternative to shared housing or social housing, especially for those with families or partners. One participant noted that boating allowed her family to afford activities like swimming, which would have been unaffordable with a mortgage or rent.

Boaters lack access to the gas and electric grids, relying solely on stoves for heating. While alternatives like gas or diesel were mentioned, they are often impractical and

more expensive, making solid fuels the most viable option. This could be smokeless fuel over wood, but there are financial reasons why boaters may prefer using (some) wood.

Survey responses and interviews indicate that many already use smokeless fuel as their primary heat source. For these individuals, inclusion in the SCA would not significantly raise costs. However, those using wood or a mix of fuels would face increased expenses. Prior estimates suggested a cost difference of under £80 annually between wood and smokeless coal, though interviews revealed that wood costs may be much lower than expected due to informal sourcing, like being given free dried wood from a friend's land.

Boaters with Defra-exempt stoves would not need to change fuels, but the prevalence of such stoves is unclear. While the Morsø Squirrel is a popular Defra-exempt stove for boats, it is unclear how many boaters have one. Replacing stoves could be partially subsidised—up to 70%—through potential Defra funding, but this is not certain, and the remaining cost may still pose a burden for low-income boaters.¹

3. Practical considerations

Fortunately, smokeless coal is already widely used among boaters, partly due to misconceptions that wood burning is already prohibited. Boaters also prefer coal for its long, consistent burn and ability to maintain warmth overnight and during short absences (e.g. going to work during the day). In contrast, wood burns quickly, requires frequent tending, and is less suitable for maintaining as much heat as coal in poorly insulated

Boaters often leave the stove on all day and night in winter, due to the boat losing too much heat too quickly with no fire, and the effort and time it takes to restart it and heat the boat up again. Wood is less suitable for maintaining a fire like this for (over) 24 hours.

Additionally, wood requires more space to store and keep dry than coal. Still, boaters value the option to burn wood, especially because it provides heat faster than coal. Wood also helps reduce dampness, a common issue on boats. Moreover, through autumn and spring the heat coal produces becomes excessive, in temperature and length of time.

This can also be problematic for those with health conditions like asthma, who need

¹ Defra 2024 Smoke Control Areas Waterways Air Quality Grant Scheme: Guidance for Local Authorities (LA letter)

a cooler environment. Coal ash may also exacerbate asthma symptoms due to its toxic heavy metal content.² Overall, only having access to smokeless coal inhibits the ability to regulate temperature to individual preferences and current circumstances.

Concerns were raised about Defra-exempt stoves, particularly regarding flue height and single-door designs. While guidelines recommend a 4.5-meter flue, to prevent back draught, this is impractical on boats, where 3 meters is generally considered sufficient.³ Single-door stoves increase the risk of smoke and ash entering the cabin during ash removal, especially with shorter flues. Finding a suitable stove that meets all requirements and fits on a narrowboat may be challenging.

Alternative heating methods—diesel, LPG, solar—were generally deemed impractical or insufficient. Storing enough gas on a boat for heating is unsafe, diesel heats the boat insufficiently while also still creating air pollution, and solar panels do not produce enough power for heating. None of these options address dampness of the boat well enough either. The only widely supported alternative was connection to the electric grid, which, while not solving dampness, was seen as a desirable long-term solution.

4. Enforcement

Boaters expressed concern about enforcement, even when using smokeless coal. To maintain heat for longer, fires are often set to slumber, which increases smoke and moisture. This practice is not recommended, but boaters argue that avoiding it can lead to discomfort by being too warm, fire risks, or stove damage.

Even properly used smokeless coal produces smoke during ignition. Boaters noted that this phase can last from 10 minutes to an hour, depending on conditions. Given the low height of boat chimneys and their proximity to footpaths, smoke is more noticeable and more likely to be reported than from houses.

5. Targeting

Some boaters feel marginalized and distrusted by both the council and residents. One participant remarked: "I think the boats are seen as kind of an unnecessary evil." There is concern that SCA rules could be used to unfairly target boaters due to prejudice.

This perception is compounded by a sense of injustice. Boaters often strive to

² Physicians for Social Responsibility (2010) *Coals Ash Toxics: Damaging to Human Health*. <u>Coal Ash</u> Toxics: Damaging to Human Health | Physicians for Social Responsibility

³ BFCMA. Chimney & Flue Design. Chimney & Flue Design - Wood & Solid Fuel - BFCMA (British Flue and Chimney Manufacturer's Association) (last accessed on 02-06-2025)

minimise emissions and live sustainably of their own initiative. Being scrutinised for the one thing they cannot easily change feels disproportionate and unjust. Being asked to change their burning practices, while they believe there are other boaters causing more pollution through burning inappropriate materials who are not currently enforced against, also creates a sense of unfairness.

6. Conclusion

Life on a boat presents unique challenges. Heating is difficult due to poor insulation, and other aspects—access to water, waste disposal, lack of postal addresses, maintenance, and raising families in small spaces—add complexity. One participant noted: "People on boats don't shower every day; that's a house thing", showing the loss of certain luxuries that come with living on a boat.

Boaters also face systemic issues, such as inaccessible moorings and facilities (one person called access to the Jesus Green tap "purely dangerous"), broken infrastructure like the pump-out, and uncertainty around the permanency of their moorings. These unresolved problems contribute to a sense of being unfairly targeted by

the

SCA.

While some boaters manage well, others are more vulnerable—financially, physically, or due to caregiving responsibilities. The proposed rules could have negative effects on people's health and wellbeing, either by directly influencing their physical condition, or by making it more difficult to keep warm. It could also worsen boaters' financial situation through increased fuel costs, unaffordable stove replacements, or fines.

Given the financial, practical, and social implications, we recommend against including permanent residential moored vessels in the SCA. The risks of exacerbating hardship and damaging community relations outweigh the potential benefits.