Save Our Island (Hayling) wishes to register an objection to the Southern Water Hampshire Water Transfer & Water Recycling Project Development Consent Order Application, and to also confirm my agreement with the Havant Water Matters' Community response.

There are additional issues concerning the DCO which we wish to bring to your attention.

1 INTRODUCTION

1.1

It is important to recognise that sea level rise is not a precise science. There are many variables involved which themselves are changing over time, primarily influenced by Climate Change and geological changes. As one example, our southern coast is sinking at an average rate of 1mm per year due to isostatic rebound, whilst Scotland is rising.

The other key variables affecting our interconnected Langstone & Chichester harbours include:

- Rising spring tides
- Tidal surges
- Low air pressure
- Bimodal swell waves
- Storm waves
- Heavy rainfall
- Localised venturi surges

1.2

The "1 in 200-years" representation of flood risk used in this DCO (APP-191 3.7.1 page 9) is a misleading interpretation of the flood risk. The correct interpretation is a risk of 0.5% at any point. Therefore, a flood event could occur at any point in time.

2 BASELINE

2.1

The baseline quoted in the Application (APP-191 5.1.4 page 12) is the EA's sea level for our area based on the 0.5% flood risk acceptance at 3.18mtrs AOD. This does not represent a reasonable starting point.

2.2

In 2024, a tidal event gave us a predicted sea level in Chichester Harbour of 2.37mtrs AOD, plus a measured surge of 0.85-1mtr, giving us a total measured sea level of 3.22-

3.37mtrs. However, predicted high tide levels of 2.57mtrs or greater are now regular events, so it is reasonable to set a baseline of 3.57mtrs not 3.18mtrs.

3 RESULTING LEVELS

3.1

Adding the EA High Tide Flooding (H++) allowance of 1.9mtrs results in a predicted tide height of 5.47mtrs. This represents a more realistic level compared to the 5.18mtrs used in the DCO.

3.2

The H++ allowance does not include wave action, which could exceed 0.5mtrs. The adjacent coastline will be impacted by storm wave action.

4 DCO CONSIDERATIONS

4.1

The DCO makes clear the proposal is an integrated system from the WTW through treatment and via the pipe network to Havant Thicket and onwards to Otterbourne. This is a 24/7 continuous process and is expected to be in place for 100 years or more (APP-082 3.7 page 83). On the EA Flood Risk Map showing Budds Farm & the recycling site (see APPENDIX 1), the major portion of the other essential components located at Budds Farm and the access routes are at Cat 2, 3 and Climate Change flood risk. The PC, MCC and WRP sites are planned to be raised up – the rest of the site and access routes are not (see APPENDIX 2). This DCO elevates the significance of this location as a major national utility (to a NSIP Nationally Significant Infrastructure Project.)

4.2

The flood risk is real and significant. The Shoreline Management Policy refers to Coastal Partners' statement that the coastline here is in the "hold the line" classification. However, Coastal Partners – who are responsible for planning all coastal protection and adaptation – make clear that this does not guarantee that protection funding will be made available, and no plans are in place for protection of this area.

4.3

This NSIP should demand the DCO should contain a detailed analysis of the flood risk and an appropriate plan to protect the area for the 100 years' lifetime proposed in the DCO. A0.5% flood risk may be considered insufficient for this critical continuous process.

4.4

This analysis and the plans should include the following areas:

- Coastal erosion risk and protection plans
- Flood protection plan for the WTW area. The casual acceptance of a 0.5% flood risk may not be good enough for a no-break environment, and a higher level of protection may be required.
- Flood control systems for the two tidal streams running through the site: Brockhampton Stream and Hermitage Stream
- Access routes protection
- Sealing of the historic rubbish dump the WTW is built over. The dump was active through WW2 and its contents are unknown. Cross-contamination may be an issue.

The cost of this analysis and subsequent action plans should be included in the DCO as an essential prerequisite. It may also be the case that SW will be required to fund protection projects as they are the primary landowner.

5 COST CONSIDERATIONS

5.1

The DCO states that this large-scale integrated utility is expected to last 100 years or more. The individual components including the buildings have a much shorter lifetime and will require one or more replacements through the 100 years or more of operational life. These components' lifecycles are included in APPENDIX 3.

This of course does not include the Havant Thicket Reservoir which has an indefinite lifetime. This raises points regarding the costs of the Project.

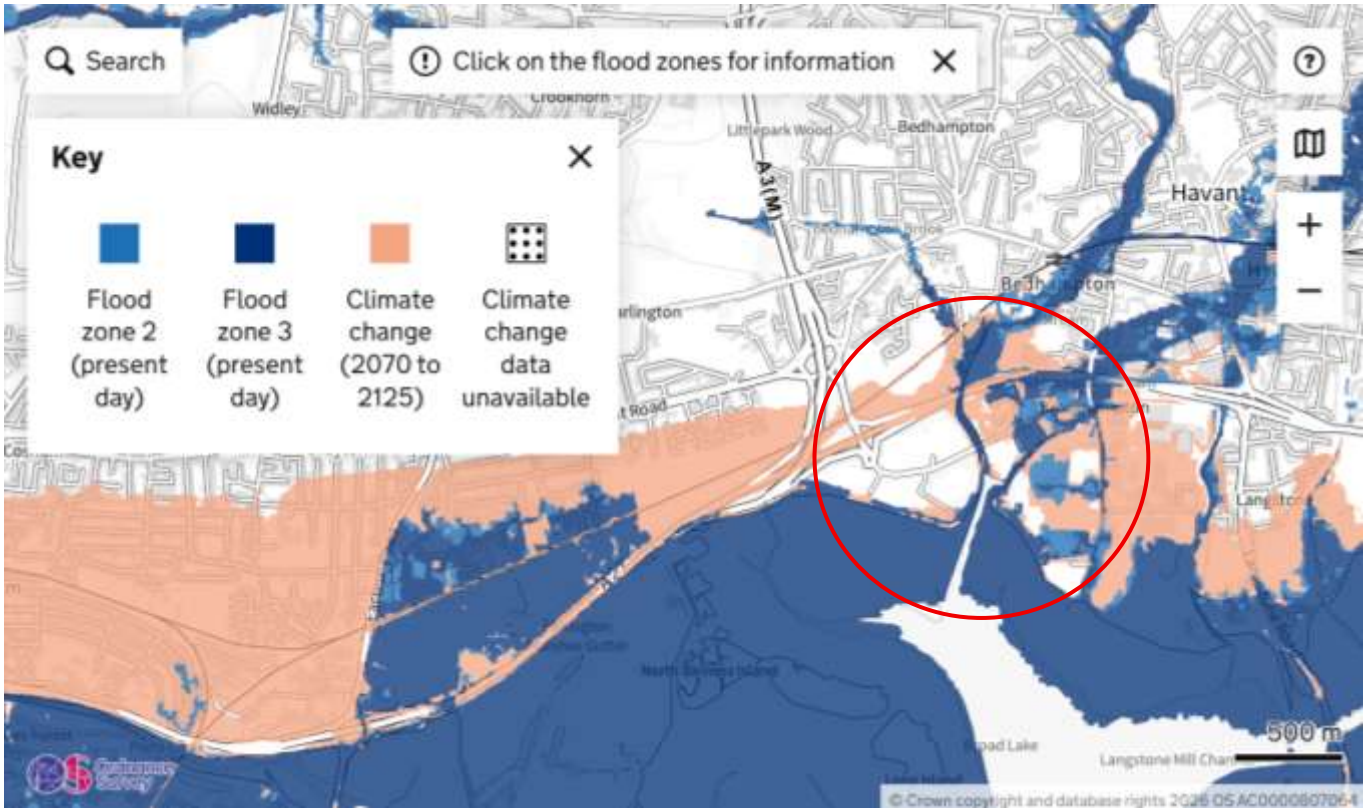
5.2

To enable the NSIP to fully understand the real lifetime costs – and more importantly – to be able to:

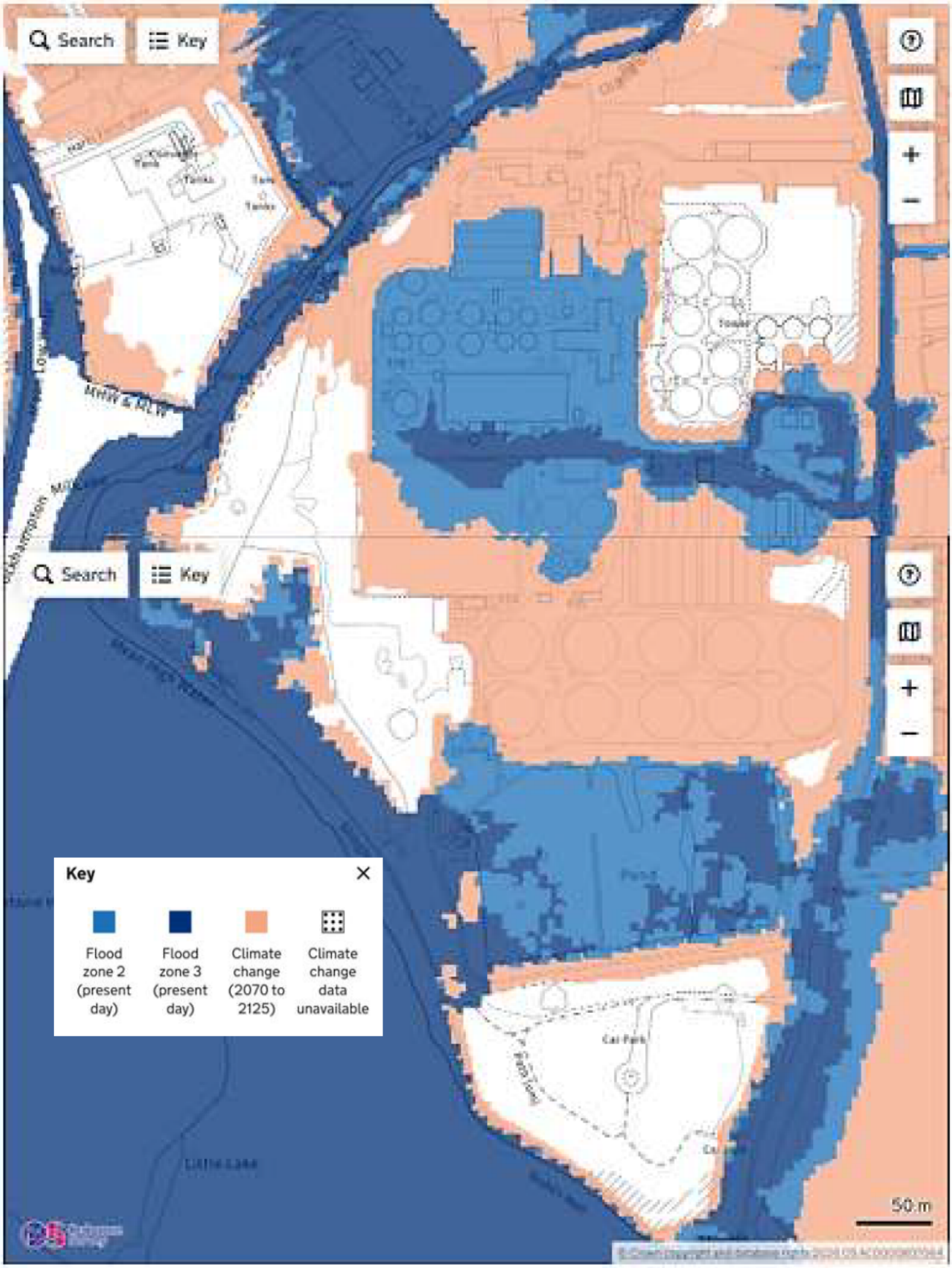
(a) understand the overall service delivery costs; and

(b) compare the cost/benefit of this proposal against the viable alternative solutions. SW should provide the year-by-year replacement and maintenance costs to cover the 100 year proposed lifetime.

APPENDIX 1 EA Flood Risk Map of Budds Farm & the recycling site



APPENDIX 2 EA Flood Risk Map with Budds Farm detail



APPENDIX 3

Table 3-24 Water Recycling Plant site assets design life

Asset	Expected design life
Concrete structures	50 years
Tunnel shafts	100 years
Chambers and manholes	100 years
Masonry and steel framed buildings	60 years
Secondary steelwork	30 years
General GRP	30 years
GRP covers	20 years
Steel tanks	20 years
Steel fencing	25 years
Timber fencing	15 years
Mechanical and electrical components	20 years
Instrumentation, control and automation components	10 years
Pipework within the WRP site	20 years
Flexible hose	10 years
Gearboxes	20 years
Bearings	100,000 hours
Other mechanical moving parts	75,000 hours
Pumps	20 years
Screens and screenings handling	Minor overhaul required every 5 years, major overhaul required every 10 years
Blowers, compressors and fans	7.5 years
Control panels and motor control centres	20 years
Programmable Logic Controllers and Supervisory Control and Data Acquisition	10 years
Switchgear	25 years
Variable speed drives	15 years
Detectors (gas, fire, intruder)	10 years
Closed circuit television	10 years
Batteries	3 years
Lightning protection	40 years
Internal lighting	15 years
External lighting	10 years
Valves	2,500 opening and closing cycles