

## **MPA Note on Interactive Map**

### **Purpose of this Note**

The purpose of this note is:

- (i) To respond to the interactive map submitted by the industry after the last hearing session (24/01/19);
- (ii) To address an issue raised during the hearing regarding the weight to be given to the material presented by the industry on the hearing day ;
- (iii) To seek to contextualise the evidence provided.

The evidence presented in this note is provided without prejudice to the MPA view that no material weight should be placed on the map, in particular because it is our view that it has been prepared on a false premise, ie. that the policy sterilises land from hydrocarbon development. This is not the approach which the policy seeks to take, for reasons explained at the hearing.

### **Key input by the Industry**

1. Address Point data - The industry have used 'Residential Addresses' (Code R) from the dataset provided to the industry by Office for National Statistics (ONS) under licence.

NB: Primary address point data not supplied for licensing reasons. The date of the data is unknown and not specified on the documentation received.

2. Buffers to 'Residential addresses' - Each residential address has been 'buffered' by 510m encircling the address point to indicate the area set out in the policy. The address points/buffer is limited to within the licensed PEDL areas within the boundary of the Joint Plan area (see Figure 1).

NB: The GIS table provided by the Industry is labelled as 510m buffer zone as opposed to 500m and is taken forward on this basis.

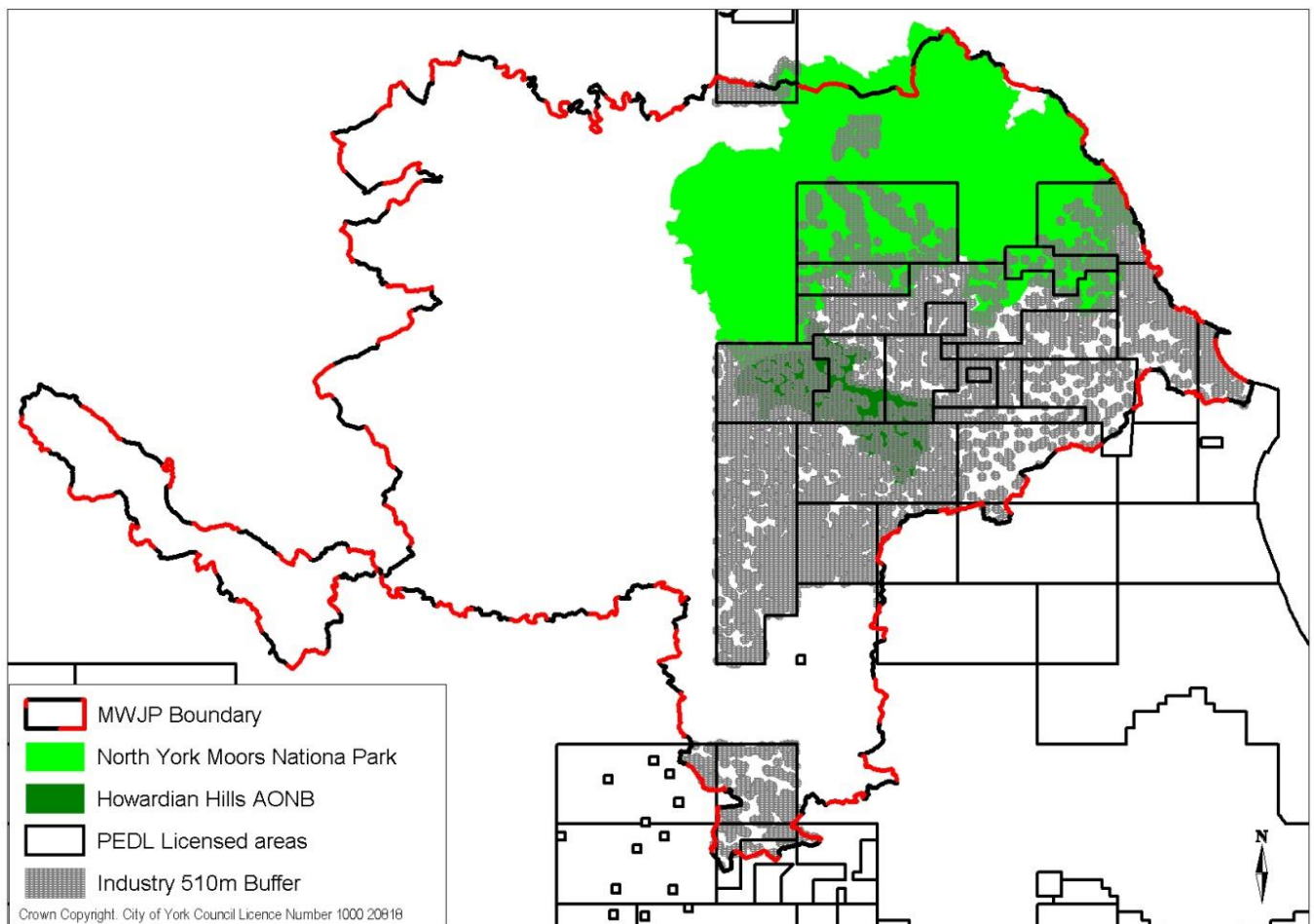
Given the point based address data used by the industry was not released for consideration, the data can not be checked for accuracy. Further, the release date of the data is unknown and no comment can be made on the point in time to which the data applies.

### **Outcomes from Industry**

The 510m Buffer zone area provided currently covers 164,603 ha. However, this extends into areas where potential exploration/ extraction is restricted, in particular

the North York Moors National Park and Howardian Hills Area of Outstanding Natural Beauty (AONB).

**Figure 1: Representation of industry buffer zone in plan area.**



## **MPA Analysis**

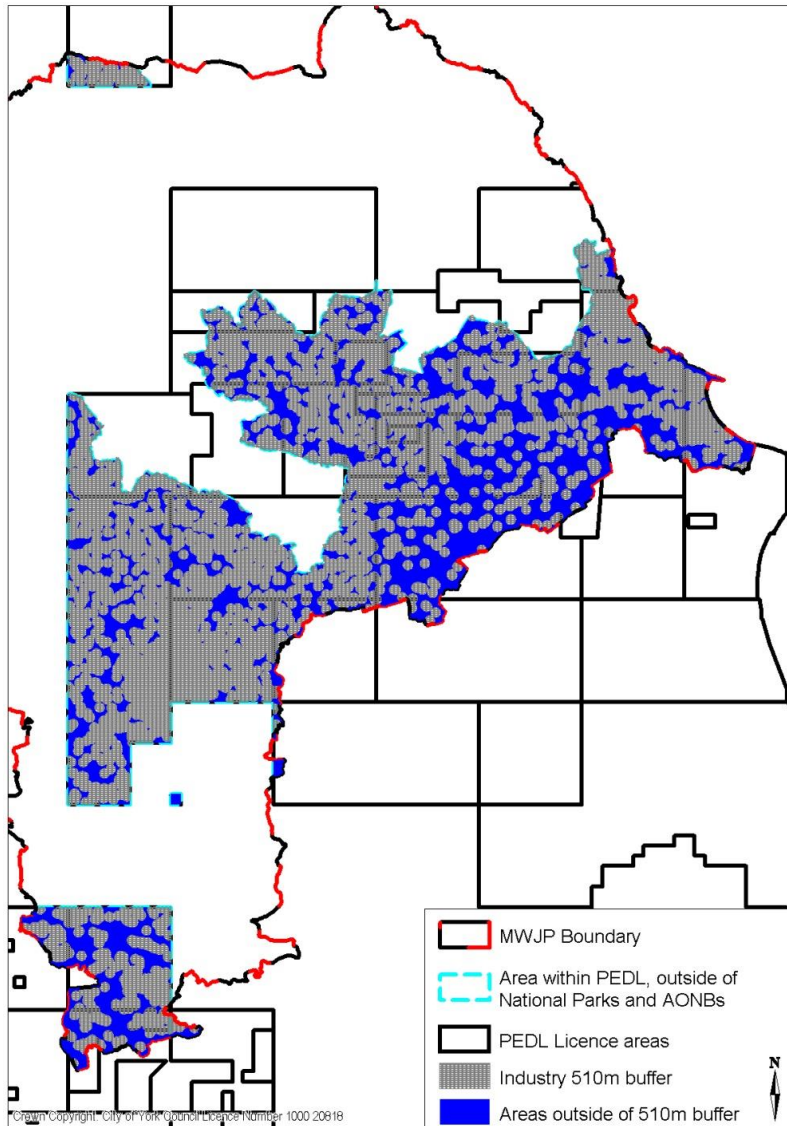
### **Area outside of industry buffer zone**

The Joint Plan area, minus the North York Moors National Park and Howardian Hills AONB, within PEDL licence areas spans 161,744 ha. When the industry buffer zone is constrained to this area (within the plan area/pedls and outside of the NYMNP and AONB), it is 117, 925 ha.

To understand the residual amount of land for potential exploration should the buffer zone be applied as a hard buffer, which should be noted is contrary to the proposed policy M17, the MPAs have calculated the area outside of the 510m. To do this accurately, the industry buffer zone has been inverted using GIS. This inverted area equates to 43,819ha or 27% of the plan area within the PEDL licence areas (shown in blue on Figure 2). It should be noted that just as the MPAs do not accept the

premise upon which the map has been prepared by the industry, the areas outside the “buffer” should not be taken as areas where development should be regarded as acceptable.

**Figure 2: Areas outside of the Potential for exploration**



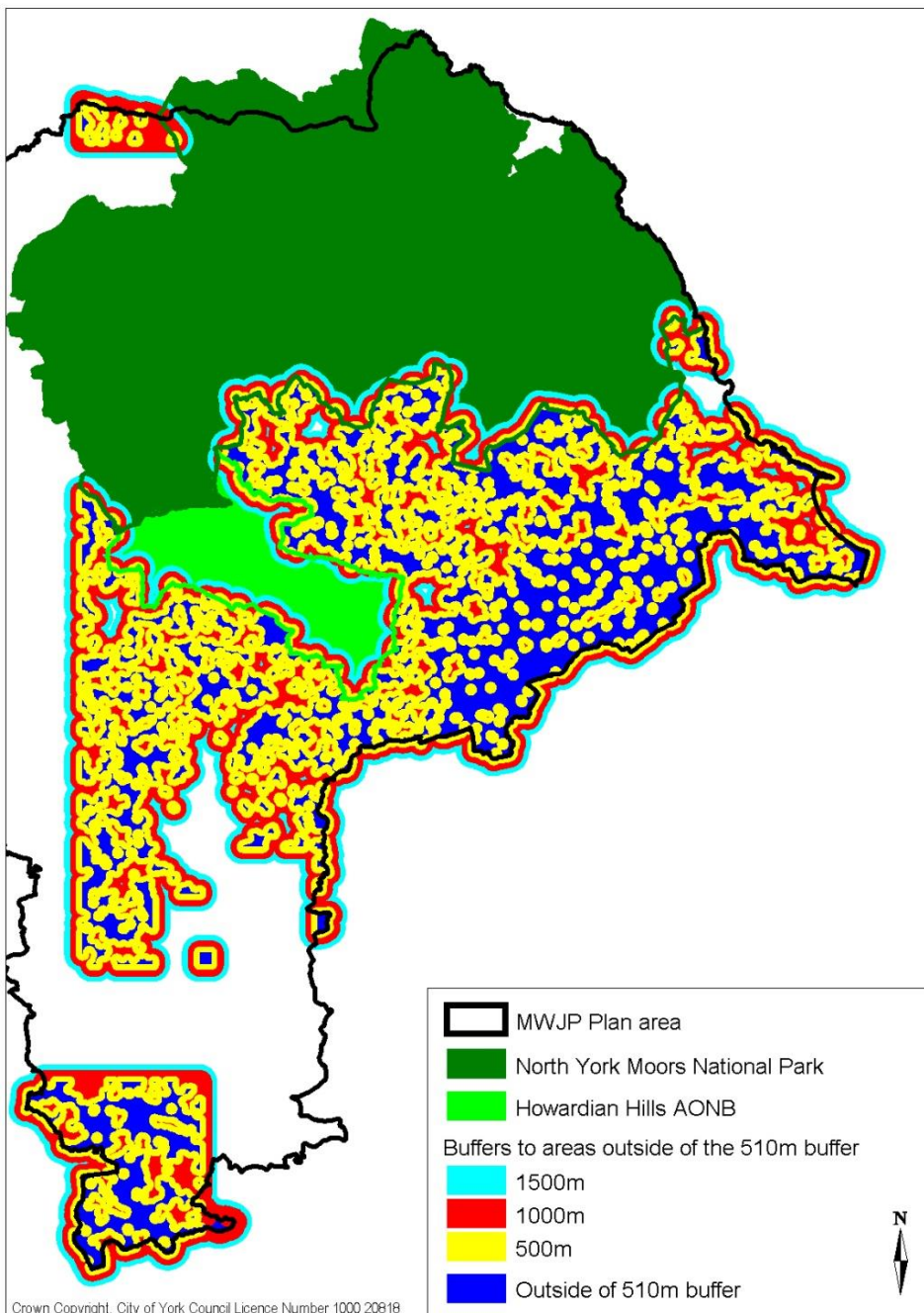
It is accepted that lateral drilling can be used when considering extraction of shale gas. It is also understood by the MPAs that exploration drilling can also be undertaken at an angle. In order to understand the potential area therefore applicable for exploration and extraction, the MPAs have calculated the potential of land to be explored laterally using 500m increments from areas remaining outside of the 510m industry buffer zone (43,819 ha) as presented by the industry.

Figure 3 demonstrates the following potential areas of the plan are available through lateral drilling:

- Within 500m – 146,225 ha
- Within 1000m – 195,266 ha
- Within 1500m – 222,186ha

This shows that lateral drilling from 27% of the plan area could have potential to access 90% of the overall plan area with PEDL licences with 500m lateral drilling. All of the plan area within the PEDL areas is within 1500m. The MPAs recognise that not all of this resource will be capable of being exploited but demonstrates the potential relationship between surface development and the ability to extract shale gas underground.

**Figure 3: Exploration potential from areas outside of 510m buffer zone**



## **Conclusion**

The intention of including the 500m zone in Policy M17 is to protect people from unacceptable adverse individual and cumulative impacts on their amenity. It sets out that development will only be permitted where it can be demonstrated in site specific circumstances that an unacceptable degree of adverse impact on amenity can be avoided.

The MPA does not accept the premise of the interactive map, ie. that it shows how the policy would have the effect of restricting development within the plan area. In any event, this technical paper demonstrates that even adopting the false premise advanced by the industry, the arguments advanced by the industry (to the effect that the policy would sterilise the area from development) are flawed, because on the basis of their own analysis 27% of the area is shown to be outside of the 500m zone and lateral drilling allows for 90% of the applicable plan area to be accessed. This confirms the position of the MPA that the interactive map is not a reliable basis upon which to criticise the soundness of Policy M17.