Thesis in relation to Mental Health

We make a submission to An Bord Pleanála on public health grounds in relation to the physical health of the people who use drinking water from the Boyne, the psychosocial health of the local community and the psychological health of the individuals within it. In modern society, unspoiled natural environments which are uninfluenced by human beings are becoming more and more rare and yet they provide enormous mental health benefits to local people as COVID has emphatically illustrated. Unfortunately, the Boyne and its catchment cannot be said to be uninfluenced and pristine (water quality is classed as moderate) but the river and surrounding natural areas still provide a significant amount of psychological restoration to citizens and visitors through fishing, water sports and walking. Indeed, the newly built greenway is aimed at capitalising on the Boyne's beauty and psychologically restorative capacity. It is known that the environmental threat of pollution and disruption to such areas has particularly strong psychological and social implications for the people who live near to, or regularly use, such natural places (Albrecht et al., 2007; Durkalec, 2015). Indeed, a large volume of past, peer-reviewed research indicates that it is these same local people who are usually the ones most concerned about, and engaged with, such issues (Hu & Chen, 2016; Liu et al., 2020; Venables et al., 2012). This is confirmed in the case of the Boyne Valley Furthermore, literature indicates that place disruption to valued places (in the form of construction, pollution etc.) can have profoundly negative consequences for the psychosocial health of communities such as intra-community conflict, deterioration of trust in government and authority, feelings of unsafety and, ultimately, mass emigration and relocation (Dixon & Durrheim, 2010). Such consequences have characterised many similar struggles against environmentally destructive projects inflicted upon communities not just in Ireland, but around the world. In relation to the struggle in County Meath, I, personally, have already experienced deep distress and various associated negative consequences as a result of this pipeline proposal. These have included sleep deprivation, feelings of helplessness, despair and anger. I am not alone in this; my attendance at

public meetings has confirmed a collective disgust and anger amongst local people that the authorities who are meant to defend their interests, Meath County Council, have rubber-stamped a proposal which is almost universally believed to be against their interests. These beliefs are shared by experts on water quality, biodiversity, zoning and planning as well as many local politicians. There is no possible way to avoid a deterioration in people's trust in these local authorities; indeed, this has already happened.

In relation to my own MSc research, I measured the relationship between place attachment and action to protect that place against a threat, in this case the proposed pipeline. Place attachment was operationalised as comprising place identity (the extent to which a place is integrated with one's sense of self) and place dependence (the extent to which one depends on a place for certain needs which are met by its physical features e.g. anglers depend on the Boyne for fishing). Many of the 193 participants in this study do indeed rely on the natural place in question, the valley of the River Boyne, not just for recreation but also for drinking water, meaning they depend on a healthy ecosystem both for their physical and psychological health. Indeed, this further underlines the critical importance, to the community, of the protection of this ecosystem. Furthermore, general place attachment, but particularly the identity and dependence dimensions, have displayed a definite association with desire to protect natural places, such as the River Boyne, indicating that such natural places provoke strong emotions (Halpenny, 2010; Udall et al., 2019. Moreover, Breakwell's (1993) Identity Process Model, describes how a valued place provides people with feelings of distinctiveness, continuity, self-efficacy, and self-esteem and is, thus, integrated with their self-schemas. Such places are, thus, very important to those who are attached to them (Korpela et al., 2009). When this person-place relationship is disrupted, it can pose a threat to one's very identity. Furthermore, the results of my research indicate that many people do depend on the local amenity that is the Boyne Valley and have integrated it with their identities. As asserted in Butler et al., (2019), law-makers and public health legislators have a duty to consider identity and place meaning in decisions which will affect these valued environments.

Indeed, the Boyne Valley and the history and culture associated with it, are significant not just to local communities but to the entire island of Ireland, appearing in many of our most treasured myths and legends. As Mazumdar & Mazumdar (2004) point out, attachment to place is learned through the process of socialization involving use of artifacts, story-telling, and place visits. As the Boyne Valley contains some of our most ancient and sacred heritage sights (Bru na Boinne) which are visited by hundreds of thousands every year who are attached to these places culturally, spiritually and socially, this pipeline would be truly spiritually damaging to many residents of Ireland as well as to our collective identity. I cannot help but wonder how we have strayed so far from our path as a society that these sacred sights are seen merely as a tourist trap and that the beautiful river flowing past them, with all of the history and mythology it carries in its currents, is treated as nothing more than a meat factory effluent dump.

Previous research asserts that threats to one's identity, in this case represented by a place, are felt on a deep, existential level (Udall et al., 2019). As Stedman (2002) has pointed out, threats to a natural place which one depends on (this community depends on the River Boyne for recreation and drinking water) is likely to generate strong emotions, such as fear and despair (Ramkissoon et al., 2012). Conversely, natural spaces, when left intact, are known to have many physical, psychological and social health benefits for people such as a positive sense of self and relaxation (Clayton, 2003) and a litany of positive emotions (see Jimenez et al., 2021, for a review). People use these places for their own psychological health which further cements the fact that public health and environmental health are deeply intertwined. The crucial importance of this has been illuminated beyond doubt by COVID-19 whereby local natural spaces provided some of the only respite and restoration for many individuals. In answering the questionnaire for my study, 93% of participants ticked either 'Agree' or 'Strongly Agree' for the statement 'I feel relaxed when I am at the Boyne Valley' and 90% rated the threat of 'Diminished overall enjoyment and restoration associated with the Boyne Valley' as 'Very severe'. This indicates that, even the idea of the threat posed by this proposal causes people deep concern. It is, therefore a duty of local area councils to factor into their decisions the amount of stress

a new project would cause for citizens, as well as the potential psychosocial damage it would cause to a community, during both construction and operation. This was not considered during Shell's campaign to build a gas pipeline in Rossport, Mayo, in 2005 and it has not been considered in the granting of permission for Dawn Meats to build an effluent pipeline discharging into the River Boyne in 2021.

It is known that taking place-protective civic action may be an effective way for a concerned, local citizen to allay that concern, and the associated stress. Indeed, past research has shown that environmental concern can be constructive if it motivates individuals to take environmental action and, in so doing, to reduce said negative affect (Coelho et al., 2017; Verplanken et al., 2020). Furthermore, this adds to the wider, societal argument for environmental health being considered in tandem with citizens' physical and psychological health as the two are intimately connected. But why are such actions asked of citizens in the first place? Why are local citizens, who all have their own day jobs, forced to become experts on environmental issues just to protect their local environments for their families and their children? Why is this left to them? We elect representatives to represent our interests and, in fact, the Save the Boyne campaign has experienced a huge amount of staunch and admirable support from councillors and TDs alike in the Louth Meath area. And yet, Meath County Council planning department approved this pipeline in spite of the fervent protestations of local area councillors and TDs who represent the people of the area affected, in spite of the many instances of procedural incorrectness in the planning proposal and in spite of the many EU-level directives around biodiversity and water quality aimed to protect habitats like the Boyne Valley as well as people's drinking water. Several members of the Save the Boyne campaign have contacted Meath County Council's planning department to seek information regarding the decision and the appeal. However, based on the advice of an unknown party, the Council is refusing to speak with us until after the appeal deadline has elapsed, displaying a dictinct lack of transparency. The trust in Meath County Council to represent the citizens of Meath is, understandably at an all-time low. In the absence of true representation, this community has been forced to represent themselves. The damage done to

the relationship between the Council and its citizens cannot be underestimated and the long-term consequences remain to be seen.

To conclude, it is clear from a wealth of scientific literature, my own research and from the specific details of this proposal that this pipeline, if built, would have profoundly negative consequences for public health. Specifically, it would pollute the drinking water of tens of thousands of people significantly increasing the risks of potential harm from its consumption. The pipeline's construction and operation would drastically diminish the beauty, and thus, the psychologically restorative capacity of the Boyne Valley for ramblers, anglers, water sports enthusiasts and local residents. Indeed, as my own research has revealed, many residents and visitors have integrated the River Boyne and its surrounding areas with their identities meaning that, for many, this proposal threatens our sense of who we are. This also applies on a more macro level, where this pipeline would have negative consequences on Irish culture and spirituality by tainting one of our most treasured amenities. Finally, this proposal has already significantly eroded the trust local citizens have in Meath County Council, the Council's capacity to represent the citizens of Meath and Louth (who also use the river for drinking water) and in the fairness of the process by which these decisions are made. If the proposal ends up getting approved by An Bord Pleanála, this could only serve to further diminish this trust and the community's determination to take matters into their own hands by fighting it in any way necessary including the European High Court. In the interests of public health, dropping this proposal is the only morally, ethically and legally defensible position.