

**ENVIRONMENT OVERVIEW & SCRUTINY COMMITTEE****28<sup>TH</sup> NOVEMBER 2019**

<b>REPORT TITLE</b>	<b>WEST KIRBY MARINE LAKE MANAGEMENT UPDATE</b>
<b>REPORT OF</b>	<b>COLIN CLAYTON, ASSISTANT DIRECTOR – COMMUNITY SERVICES</b>

**REPORT SUMMARY:**

The report aims to inform the EO&S Committee of the environmental and civil engineering issues affecting the water and sea wall of the West Kirby Marine Lake. Through a soft market tasting exercise, two independent sets of specialist companies have detailed the steps required to provide solutions for the council to consider. The issues affecting the marine lake are an invasive seaweed, the accumulation of silt on the lakebed and the degradation of the lake wall bordering the Dee Estuary over which the incoming high tide flows. The first two items impact negatively on the ability to conduct water sports. Boat propellers are fouled with the weed and sailing boats and windsurfing boards become grounded where there is insufficient depth of water.

A company specialising in marine ecology, estuary regulations & permissions and civil engineering projects is requested for the Council to consider the initial identified stages

**RECOMMENDATION/S**

‘Note and comment prior to submission to Cabinet Member (for decision).

## **SUPPORTING INFORMATION**

### **1.0 REASON/S FOR RECOMMENDATION/S**

- 1.1 The West Kirby Marine Lake, with its views across the Dee Estuary to Hilbre and North Wales is possibly the finest outdoor location on Wirral. The Marine Lake is enjoyed by all those who enjoy water sports or visit this location. The lake is of local, regional, national & international importance with competitors for the annual Wilson Trophy (sailing) travelling from Australia and the Americas as well as Europe to compete.
- 1.2 A new Council sailing centre built of larch; steel & glass is due for completion in March 2020. The centre runs water sports activities throughout the year. At the south end of the lake, West Kirby Sailing Club enjoys a large membership and hosts many competitions & events on the lake as well as providing general sailing opportunities for its membership.
- 1.3 Since 2017, the issues of weed growth and reducing lake depth due to a build-up of silt has created problems for those sailing & windsurfing. The lake is integral not only to West Kirby, but to the whole of Wirral's visions of delivering on Environment and Business. The lake was last drained in 2009.

### **2.0 OTHER OPTIONS CONSIDERED**

- 2.1 Currently there are three options. One is not to do anything, allow the weed & silt to increase thus rendering the lake unusable as a location for non-tidal water sports. The lake would continue to decline and at some point, be breached by the continuous erosion of the tides. The combined effects would result in the new council owned sailing centre to be without a lake on which to sail. West Kirby Sailing Club would only be able to operate on the Dee Estuary. Lake licence fees would be lost. West Kirby as a town may start to decline as a popular visitor destination.
- 2.2 The second option is to do the minimum of the future identified works. This may lead to a short-term fix, resulting in the lake & wall being dredged and repaired in a further ten years. (Last drained and repaired in 2009). Was this a minimal option then? The weed solution is yet unknown. Can this be eradicated, or is annual maintenance required? consultancy to advise.
- 2.3 The third option is to begin the process of investigating the steps required to secure the future of the lake as a sailing venue and for Wirral Council to continue delivering on its Environmental pledges of Leisure & Cultural Opportunities for all, Attractive Local Environment and Wirral's Residents Leading Healthier Lives. For Business we have pledged that we need to ensure that Assets and Buildings are Fit for Purpose. These pledges in turn contribute towards a Vibrant Tourism Economy with Increased Inward investment.

### **3.0 BACKGROUND INFORMATION**

- 3.1 Three inter-related issues are currently impacting on the usability of the water space of the marine lake at West Kirby also on the integrity of the outer wall of the lake.

- a) Since the last dredging operation in 2009 there has been a build-up of wind-blown sand and tide-borne silt within the lake which is significantly reducing the available depth of water in many locations.
- b) In 2018 reports were received of an invasive species of seaweed within the lake, thought to be sargassum muticum. The seaweed has since been observed to grow rapidly during May - June and has formed large rafts of floating weed which fouls propellers and rudders of sailing craft and impedes users of the lake. The weed has also been observed to anchor on the wall structures that provide the boundary to the lake. The weed is dormant in the autumn & winter then awakens its lifecycle in springtime.
- c) Inspections of the outer lake wall have identified areas of degradation thought to be as a result of marine growth anchoring into and dislodging the asphaltic bonded aggregate the forms the lining to the lake. At some locations the stone core to the wall and lake walkway can be observed.

3.2 West Kirby Marine Lake sits within the Dee Estuary which is protected by many international and national environmental designations. Operations to manage or remove the seaweed and/or silt will require permissions and licences from environmental regulators as will works to repair the lake outer wall. We believe the weed cannot be totally eradicated, only managed. (Marine Ecologist to confirm). Furthermore, methods of removal may require the lake to be emptied of water which itself will require estuary permissions. (Investigations into alternatives yet to be determined). Additionally, the tidal refilling operation is likely to cause significant damage to the lake wall and walkway due to its current degraded condition. The action of the sea water rushing over the wall at high tide causes the wall to degrade.

3.3 Soft market testing with two companies have concluded that there should be three key steps to progressing the actions required. Firstly, through a tender process, engage with a consultancy that can advise on the marine ecology and civil engineering issues. A list of options would be prepared for the Council to consider alongside estimated costs. Secondly, depending on the preferred option, a second tender process would commence to engage with a company who would design, and project manage the option selected. Thirdly the work of physical removal of the weed & silt along with the lake wall repairs. This again would require tendering for. There may be options for external funding that a consultancy might consider.

#### **4.0 FINANCIAL IMPLICATIONS**

4.1 There are three key elements to the finances. The first is the engagement of a specialist consultancy to investigate the issues then prepare options for Council appraisal. An action plan would be produced for the three inter-related issues listed above. Soft market testing indicates a sum between £40,000 - £47,500 to engage with a marine & civil engineering company. Once the options were considered by the Council, a tender for the physical removal of the weed, silt and lake walls would be necessary. That figure will become known once the consultancy has been engaged and can commence the appraisals. It would then be necessary to again engage with a consultancy to design and project manage the selected scheme. Each of these steps would be costed once the options are selected. Only the initial consultancy price would be known at the outset.

## **5.0 LEGAL IMPLICATIONS**

- 5.1 West Kirby Marine Lake sits within the Dee Estuary which is protected by many international and national environmental designations. Due to the estuary's populations of waders and wildfowl, the location is of significant conservational importance. Such regulatory bodies overseeing the Dee Estuary include non-exhaustively; Crown Estates, Natural England, Natural Resource Wales, The Environment Agency, the North West Inshore Fisheries Conservation Authority and the Marine Management Organisation (MMO).

## **6.0 RESOURCE IMPLICATIONS: ICT, STAFFING AND ASSETS**

- 6.1 The key implication is the timing of these works in relation to the opening of the new Sailing Centre building. The building is scheduled to be complete in Feb / March 2020 in time for the peak sailing season. It has not yet been determined when the lake works will commence. We would not want works to commence on the lake at the time of opening.
- 6.2 Staff from the Flood and Coastal Risk Management and Wirral Sailing Centre will liaise with the appointed consultancy to deliver the selected option.
- 6.3 Those using the lake require a licence to launch their craft. Loss of sales of those licences maybe incurred. (It is not yet known if the lake is to be drained).
- 6.4 The environmental issues referred to within the legal section above will have their own resource implications. These will be included in the action plan drawn up by a consultancy.

## **7.0 RELEVANT RISKS**

- 7.1 Key risk is the possible draining of the lake at a time when the new Sailing Centre is opened. If it is recommended that the lake should be drained, then we would be asking for this to be carried out from Autumn onwards.
- 7.2 Consultants would advise on likely timescales relating to permissions, licences and consents required by appropriate regulatory bodies.
- 7.3 It would be necessary to speak with the West Kirby Sailing Club and the Wirral Sailing Centre over planned lake courses, activities, events and general access. All lake users pay a licence fee. This can range from a day licence to a full annual licence. All Sailing Club members pay an annual licence.

## **8.0 ENGAGEMENT/CONSULTATION**

- 8.1 Both the Wirral Sailing Centre and West Kirby Sailing Club have full sailing programmes operating on the lake over the summer months. It will be essential to provide the Sailing Club with all ongoing plans.
- 8.2 A consultant would in collaboration with the Council prepare a Stakeholder Engagement Plan setting out a strategy and an action plan for managing and implementing all communications with statutory consultees, stakeholders and the local community.

## 9.0 EQUALITY IMPLICATIONS

9.1 There is no relevance to equality.

## 10.0 ENVIRONMENT AND CLIMATE IMPLICATIONS

10.1 A build-up of 'weed' impacting upon operations on the lake has been noted by users and confirmed by visual inspection through the water column. There are concerns this weed may be the invasive *Sargassum muticum*, however there is a need for official expert identification. Following recommendations from the Merseyside Environmental Advisory Service, council officers have been in contact with Dr Geraldine Reid from the World Museum Liverpool who has confirmed her availability to assist in the identification process.

10.2 Council officers have also been in contact with Natural England who have advised against the draining of the lake in removal attempts, unless the weed can be captured and disposed of during draining. This is due to the possibility of any such draining leading to a further spread of a possible invasive weed elsewhere, a potential offence under the Wildlife and Countryside Act. The presence of the weed may therefore impact upon routine draining and dredging plans, as well as disposal of dredged "arisings" on the Dee Estuary foreshore as was previous practice.

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## APPENDICES

## BACKGROUND PAPERS

## SUBJECT HISTORY (last 3 years)

Council Meeting	Date