

Orwell Disposal of Spoil 2014 ABP Mer Report 150108 Conclusions

Based upon the findings of the monitoring programme for the April 2014 dredging campaign, which includes the extended monitoring of measuring stakes during 2014 between March and October, the following key conclusions can be made:

- The area on the north bank of the estuary close to Levington Creek observed increased TSS supply over the monitoring periods however erosion of the north bank was identified through the stake monitoring suggesting natural variations within the River Orwell contribute to these observed changes.
- In general, the results from the stake monitoring identifies that substantial changes in intertidal elevation can occur within the River Orwell over relatively short periods of time, although the largest changes in elevation were recorded over the autumn 2013 to spring 2014 period when significant extreme storm events occurred including one of the highest tides on record.
- No significant areas of accretion were identified during the disposal period, which tends to suggest that any potential deposition arising from the disposal activities would have been very short-lived (i.e. re-suspended and transported elsewhere) and indiscernible from natural changes to intertidal elevations. Some evidence exists to suggest that disposed sediment is quickly redistributed and for a short period following the disposal, gives a temporary cessation of the on-going general erosion trends of the mudflats, particularly at up-stream locations on the south bank and around the outside of the bend between Levington Creek and Loompit Lake.
- Deposited material would appear to be largely constrained to the main channel flows and thus transported over greater distances than the extent of the monitoring, i.e. naturally transient, possibly 'feeding' intertidal elsewhere in the River Orwell (outside of the monitoring area), but potentially returning sediment to the budget of the estuary.