

The evolution of creek networks in saltmarsh restoration schemes – Implications for planning and site construction

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Creek networks and drainage features in restored saltmarshes and mudflats have been identified to locally enhance sediment supply (Reed *et al.*, 1999), increase sediment stability and increase drainage as they develop (Watts *et al.*, 2003). However, many restored sites remain poorly drained which can have implications for the ecosystem services provided by these sites.

Measurements of changes in the position and elevation of the creek networks will be presented from the Medmerry Managed Realignment site, UK, the largest open coast realignment site in Europe. The measurements will be supported by visual observations of drainage through pre-existing channels, areas excavated during site construction, the remains of terrestrial pipes and former land-use features and evidence of soil pipes which have collapsed to form embryonic creek networks.

These findings highlight the need for increased awareness of the pre-existing drainage features when planning estuarine restoration schemes and the importance of site design in the development of drainage networks. Areas needing further consideration will be evaluated, with this work providing an insight into the drainage of restored saltmarshes with implications for the design and construction of future restoration projects.

References

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