**Supplementary Information for Impact of historic sediment characterisation on predicting polychaete distributions: a case study of so-called muddy habitat shovelhead worms (Annelida: Magelonidae)**

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**Table S1.** Udden-Wentworth scale (Wentworth, 1922) with corresponding Phi values (φ) (Krumbein, 1934) for the classification of sediment diameters.

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| Millimeters (mm) | Gravel | Wentworth grade | Phi scale (φ) |
| >256 | Boulder | -12 |
| >64–256 | Cobble | -8.0 |
| >4–64 | Pebble | -2.0 |
| >2–4 | Granule | -1.0 |
| >1–2 | Sand | Very coarse sand | 0 |
| >0.50–1 | Coarse sand | 1.0 |
| >0.25–50 | Medium sand | 2.0 |
| >0.125–0.25 | Fine sand | 3.0 |
| >0.0625–0.125 | Very fine sand | 4.0 |
| >0.0313–0.0625 | Silt | Coarse silt | 5.0 |
| >0.0156–0.0313 | Medium silt | 6.0 |
| >0.0078–0.0156 | Fine silt | 7.0 |
| >0.0039–0.0078 | Very fine silt | 8.0 |
| <0.0039 | Mud | Clay | >8.0 |

**Table S2.** Approximate grain diameters (mm) from images in fig. 4 that could be clearly measured (i.e. grain edges can be clearly seen). Maximum diameter = D, medium sand = ms, fine sand = fs, very fine sand = vfs, coarse silt = cs.

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| Figure | D (mm) | Wentworth Grade  |
| A | 0.275  | ms |
| A | 0.25 | fs to ms  |
| A | 0.167 | fs |
| A | 0.15 | fs |
| A | 0.233 | fs |
| A | 0.175 | fs |
| A | 0.225 | fs |
| A | 0.108 | vfs |
| A | 0.242 | fs |
| A | 0.158 | fs |
| A | 0.225 | fs |
| A  | 0.125 | vfs to fs |
| A | 0.150 | fs |
| A | 0.167 | fs |
| A | 0.1 | vfs |
| A | 0.058 | cs |
| B | 0.367 | ms |
| B | 0.333 | ms |
| C  | 0.375 | ms |
| C | 0.417 | ms |
| C | 0.267 | ms |
| D | 0.433 | ms |
| D | 0.175 | fs |
| D | 0.35 | ms |
| D | 0.125 | vfs to fs |
| D | 0.108 | vfs |

**References**

**Krumbein WC (1934)** Size frequency distributions of sediments. *Journal of Sedimentary Petrology*, 4, 65-77.

**Wentworth CK (1922)** A scale of grade and class terms for clastic sediments. *The Journal of Geology*, 30, 337-424.