

Test stretch 2 on the River Wümme



Key Data

Measure-ID	Wue017re_01_01
Estuary	Weser
Waterway	Wümme (5301)
Chainage	Km 17.00 - 17.08
Bank side	Right

Contact

WSA Weser-Jade-Nordsee, branch office Farge
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Available documentation

BfG „Technisch-biologische Ufersicherung an drei Versuchsstrecken an der Wümme“, September 2019

DESCRIPTION OF THE MEASURE

Dead wood protection measure

Brushwood mattress

Reason for implementing the measure

Bank protection: bank erosion with erosion edge reaching up to vegetation border
Dike protection: dike toe

Bank protection required due to:

Current loads

Development and maintenance of measure

After 6-10 years the area needs to be reworked. In order to restore 10-15 m of the structure, 4-7 persons per day are required to work under tidal conditions. By stabilising the bank, the brushwood mattress has stopped and/or prevented further erosion of the bank and the reed edge. Vegetation increased from 70 % to 90 % and plant diversity grew from 10 to 19 species. The maintenance interval required is 6-10 years; the replacement interval is also 6-10 years.

MATERIAL

Material input

737.5 m of piles: length = 3.5 m, diameter = approx. 10 cm; 288.75 m² of brushwood material: length = 2.5-3 m; 73 kg wire (galvanised, 5 mm), 5.6 kg staples (galvanised)

Fascine material

Willow, birch, oak, rowan, ash, hazel, beech, mixed hardwood
Origin: regional

Pile material

Spruce, larch, fir, mixed softwood
Origin: local, regional

Other construction materials

Steel wire and staples for fixing
Origin: national

EXPENDITURE

Work days/person	8
Number of persons	5-6
Construction period	March 2014 (10 days)

Boundary conditions

CHARACTER OF WATER BODY

Type of water body

Main water channel

Characteristic water levels*

Mean tidal range	2.14 m
Mean high water	1.99 m
Mean low water	- 0.15 m

Classification as moderately saline**

Not specified

* from measurements for the period 01.04.2009-31.03.2019 at the Niederblockland gauge
** not specified

CHARACTER OF THE RIPARIAN ZONE

River bend

Undercut bank

Slope inclination

1:3 or flatter

Dominating soil type

Silt

Pollutant load

No pollutant load

Natural structures below mean high water

Not specified

Natural structures above mean high water

Not specified

Vegetation

Reed, tall forbs

Land use

No Grassland use

NATURE CONSERVATION

Special Protection Area

No

Special area of conservation under Habitats Directive

Lower Wümme lowlands, lower Hamme lowlands with the moor Teufelsmoor (DE2718332)

Natural habitat type under Habitats Directive

Unknown

Nature conservation area

Lower Wümme (ni_NSNG LÜ 00164)

Legally protected biotopes

(Bundesnaturschutzgesetz)

According to § 30 (2) no.1: near-natural zones of flowing inland waters incl. their riparian zones

Specially protected flora species

Fen ragwort (*Senecio paludosus*), marsh marigold (*Caltha palustris*), yellow iris (*Iris pseudacorus*)

Specially protected fauna species

European songbirds: among others, reed- and ground-nesting birds

SHIPPING TRAFFIC

Navigation by ships

Recreational ships

Location in relation to navigation channel

Facing the navigation channel

Speed limit

8 Km/h

Shipping traffic parameters*

Number of ships/year	41
Mean distance between passing ships	15 m
Ship dimensions**	Length > 27 m Width > 7 m

*source: AIS data analysis from 2019

**10 % of the largest passing ships

PROPERTY DATA

Land owner (bank)	German Federal Waterways and Shipping Administration (WSV)
Land owner (foreshore)	Federal State
Lease	No