

Proactive waterway management Presentation and discussion of activities planned in Austria

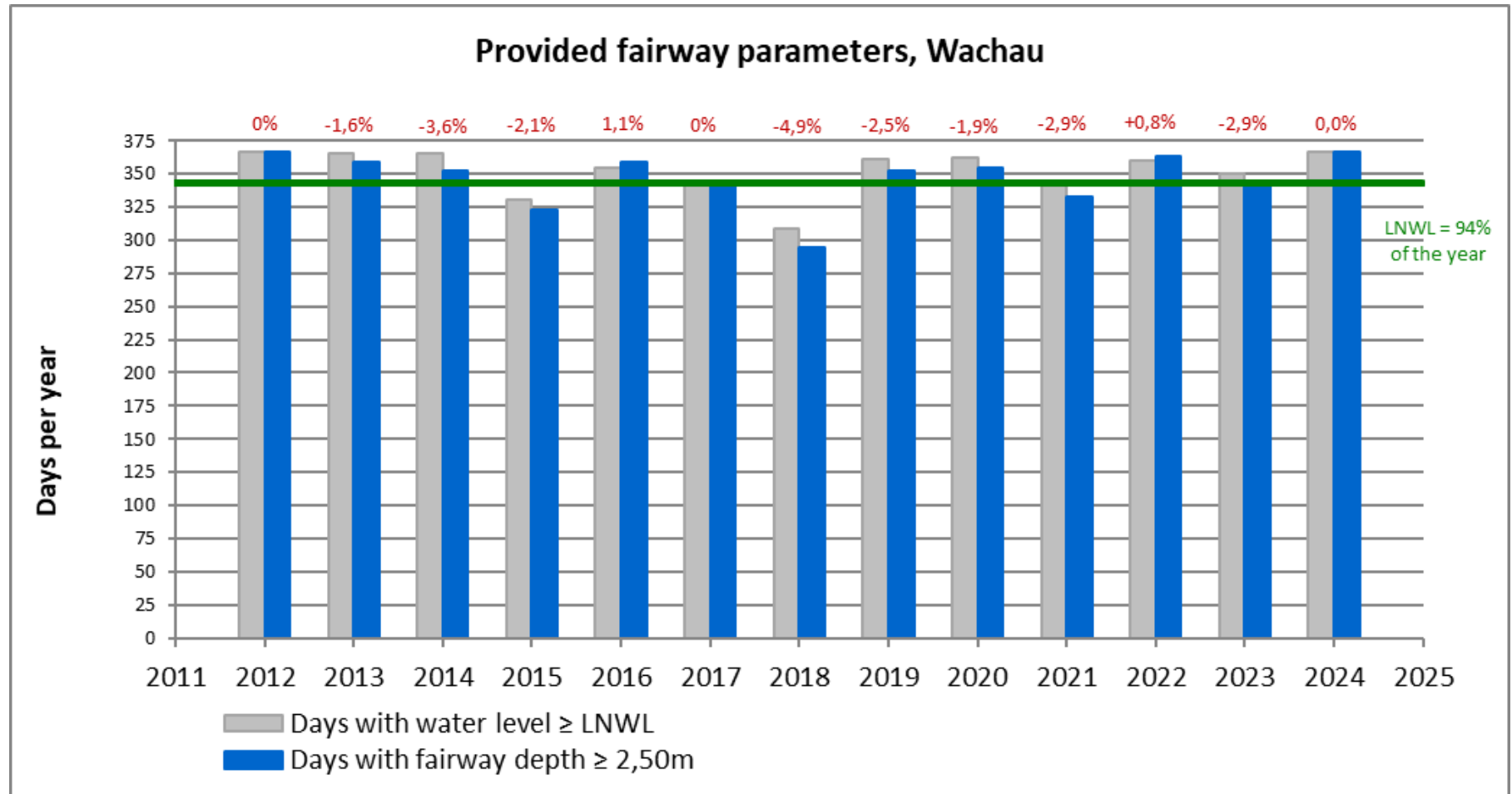


Simon Hartl, Head of Team Waterway Management, viadonau
Danube Commission, Expert Meeting on Hydraulic Engineering
5 March 2025

Status of main critical sections in 2020-2024

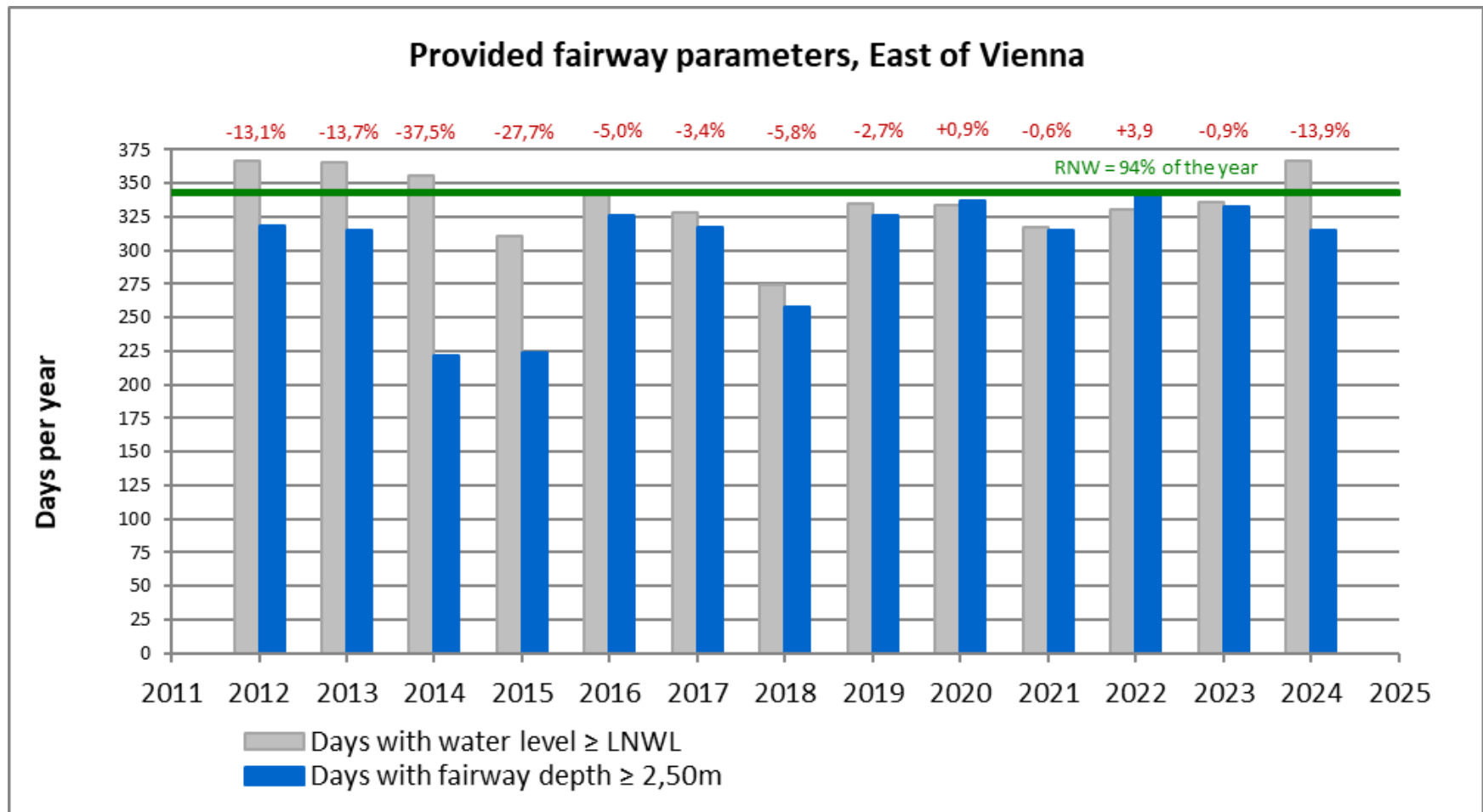
Status of main critical sections in 2012-2024

- Free-flowing section Wachau (366 days \geq 2,50m fairway depth)



Status of main critical sections in 2012-2024

- Free-flowing section East of Vienna (315 days \geq 2,50m fairway depth)



Re-verification of monitoring, rehabilitation and maintenance activities carried out in 2024

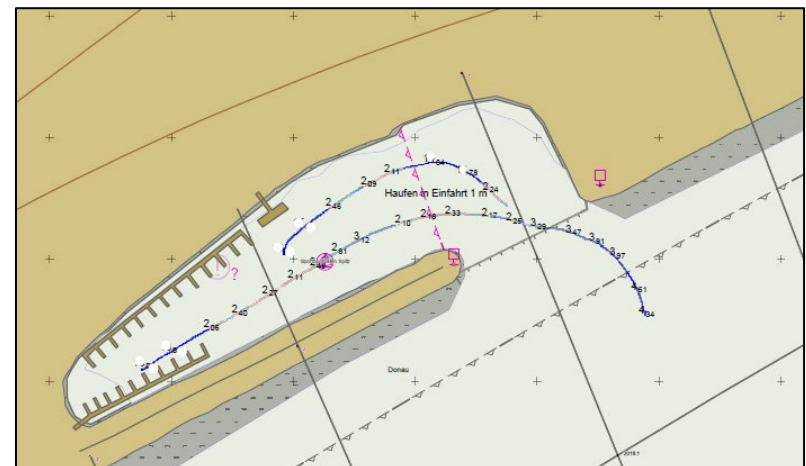
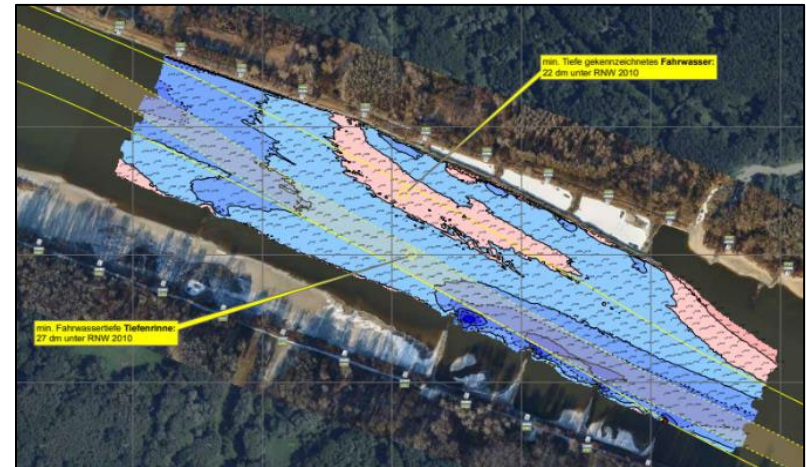
Monitoring activities 2024

- **Monthly multi-beam surveying** of the most important fords in the two free-flowing sections of the Austrian Danube; publication of results on the "fairway information" page of DoRIS (website and mobile app)
- **Single-beam surveying** of less important fords, lateral fairway sedimentation, mooring sites, and access to public ports

Basic pattern:

- bimonthly in the two free-flowing sections
- biannually in impounded river sections

-> Adjustment due to floodings in September 2024



Maintenance activities 2024

Dredging activities 2024 – free-flowing section East of Vienna

Location	River-km	Gravel
Petronell-Witzelsdorf	1 893.1 – 1 892.5	12 384 m ³
Theben/Devín	1 879.6 – 1 879.2	13 695 m ³
Röthelstein	1 883.2 – 1 882.5	12 928 m ³
Hainburg	1 885.0 – 1 884.4	27 203 m ³
Fischamündung	1 905.8 – 1 905.1	5 986 m ³
Treuschütt	1 888.4 – 1 887.6	7 874 m ³
Regelsbrunn	1 898.9 – 1 897.8	3 807 m ³
Treuschütt	1 888.5 – 1 887.5	7 139 m ³
Petronell-Witzelsdorf/ Wildungsmauer	1 893.6 – 1 891.9	51 474 m ³
Regelsbrunn	1 898.6 – 1 897.8	13 551 m ³
Theben/Devín	1 879.6 – 1 879.0	24 492 m ³
Hainburg	1 885.0 – 1 884.2	26 334 m ³
Port entrances and mooring sites		
Bad Deutsch-Altenburg mooring site	1 886.8 – 1 886.6	3 407 m ³
Lobau port entrance	1 916.7 – 1 916.5	2 694 m ³

Location	River-km	Gravel
Bedload trap Treuschütt	1 888.4 – 1 887.7	19 041 m ³
Bedload trap Hainburg	1 885.0 – 1 884.2	53 968 m ³

Dredging of bedload traps

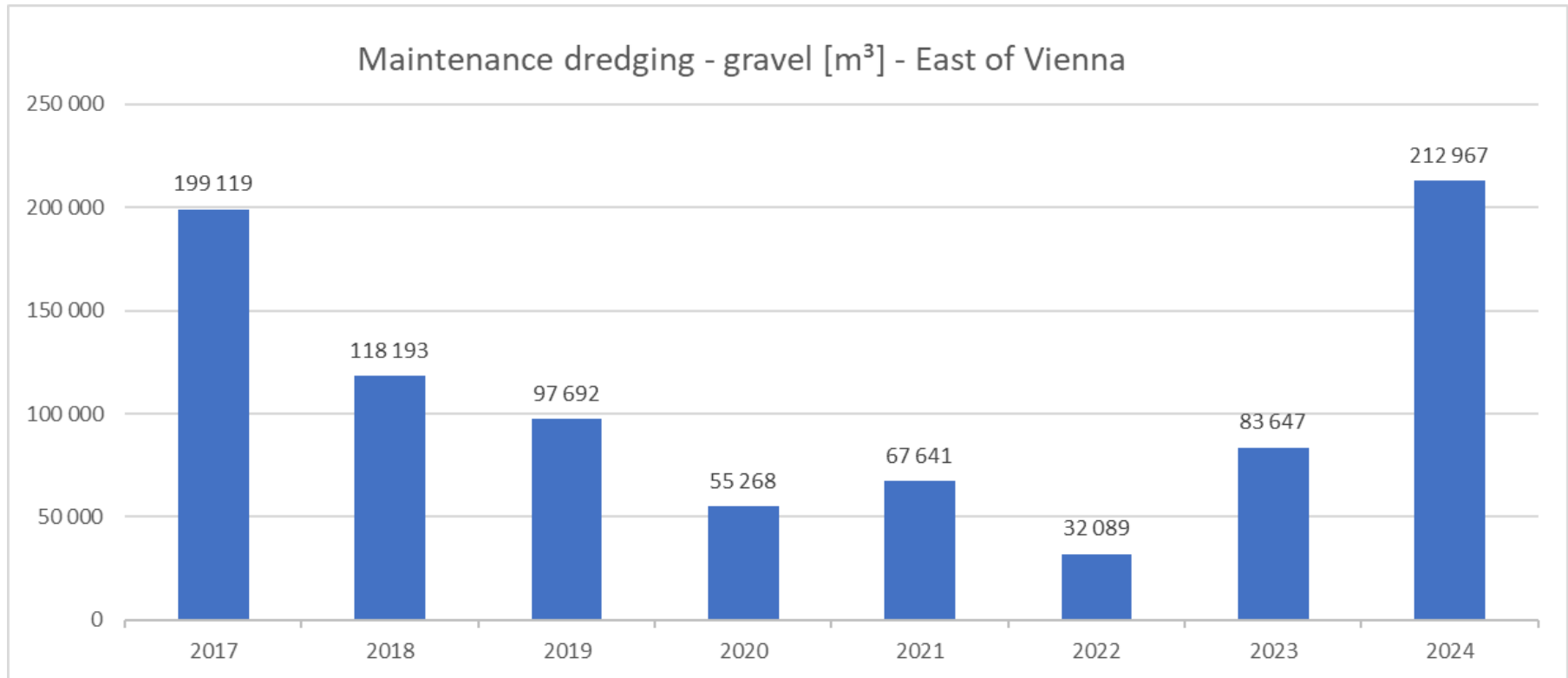
73 009 m³

Maintenance dredging - gravel

212 967 m³

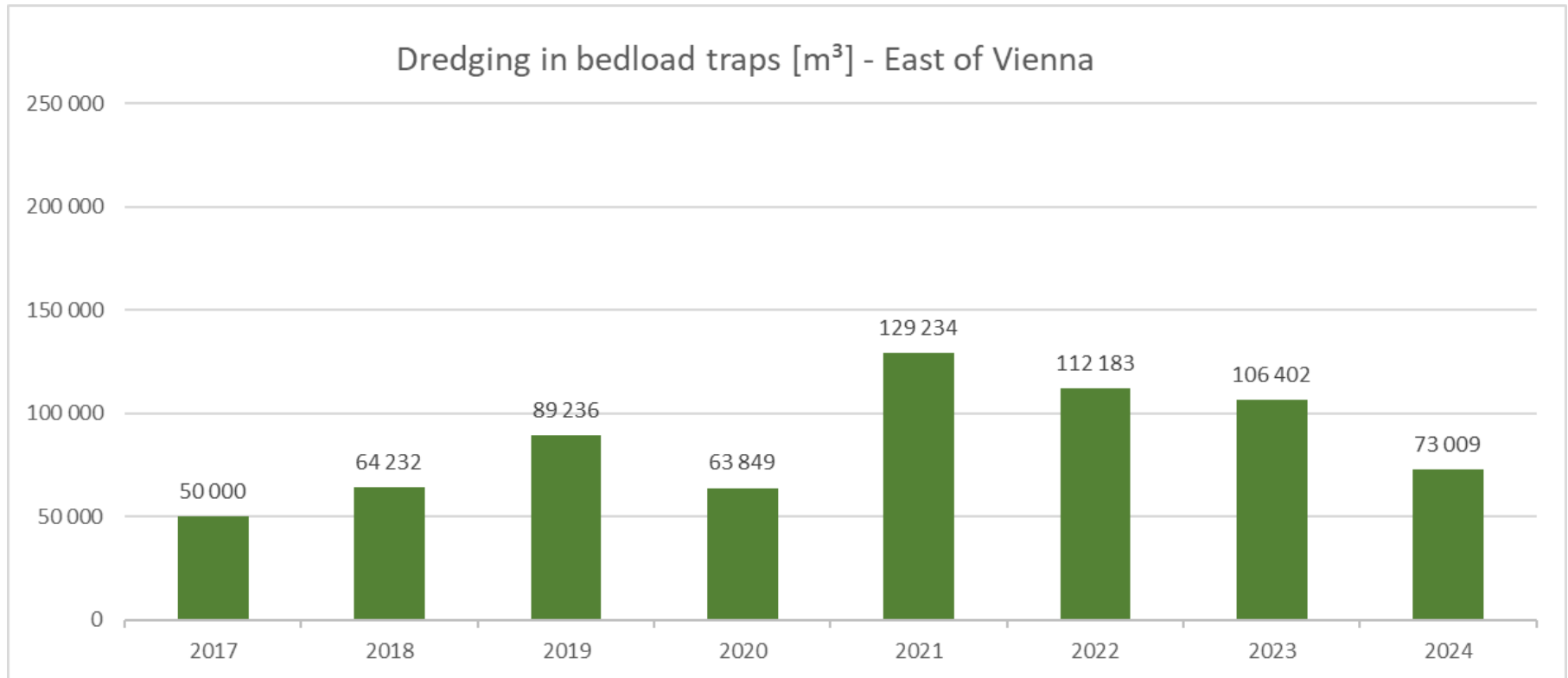
Maintenance dredging activities 2024 (gravel)

Dredging activities 2017-2024 – free-flowing section East of Vienna



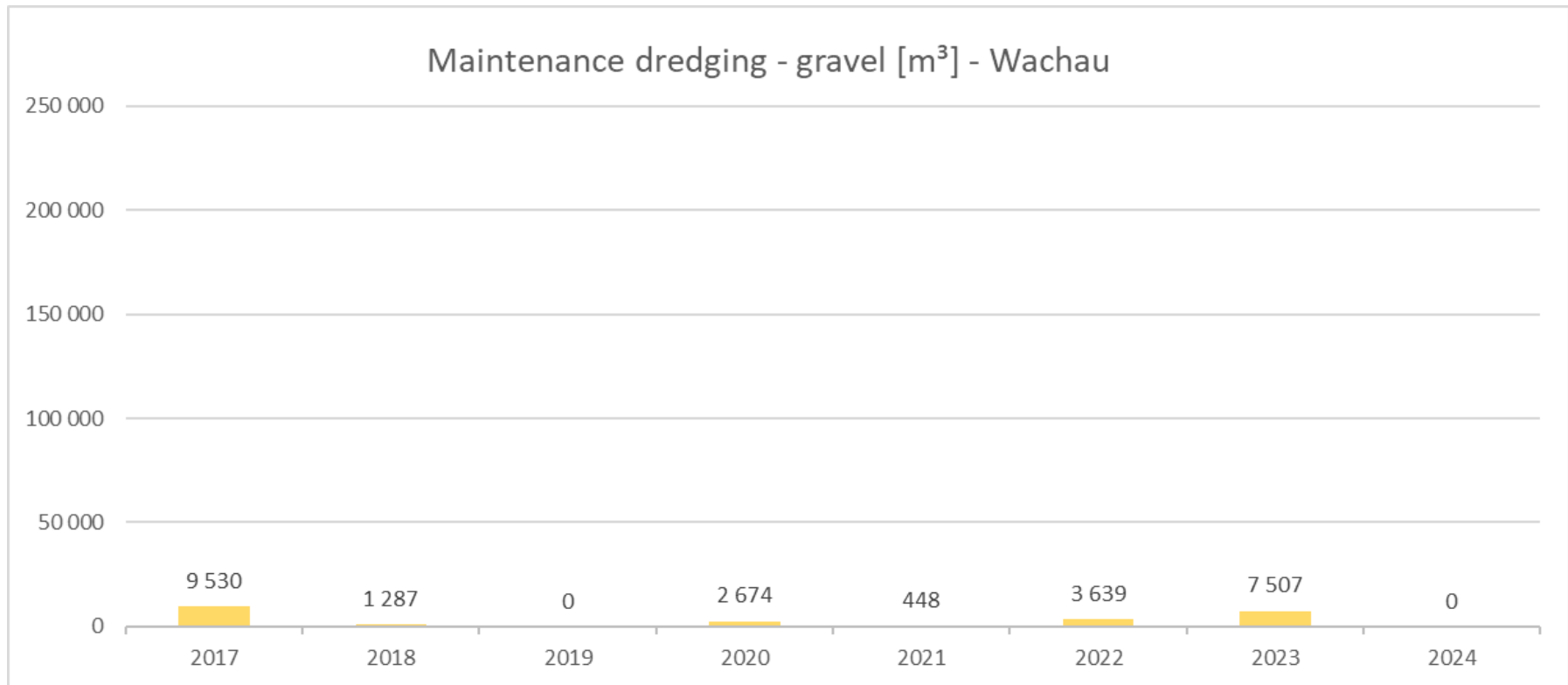
Dredging of bedload traps 2024

Dredging activities 2017-2024 – free-flowing section East of Vienna



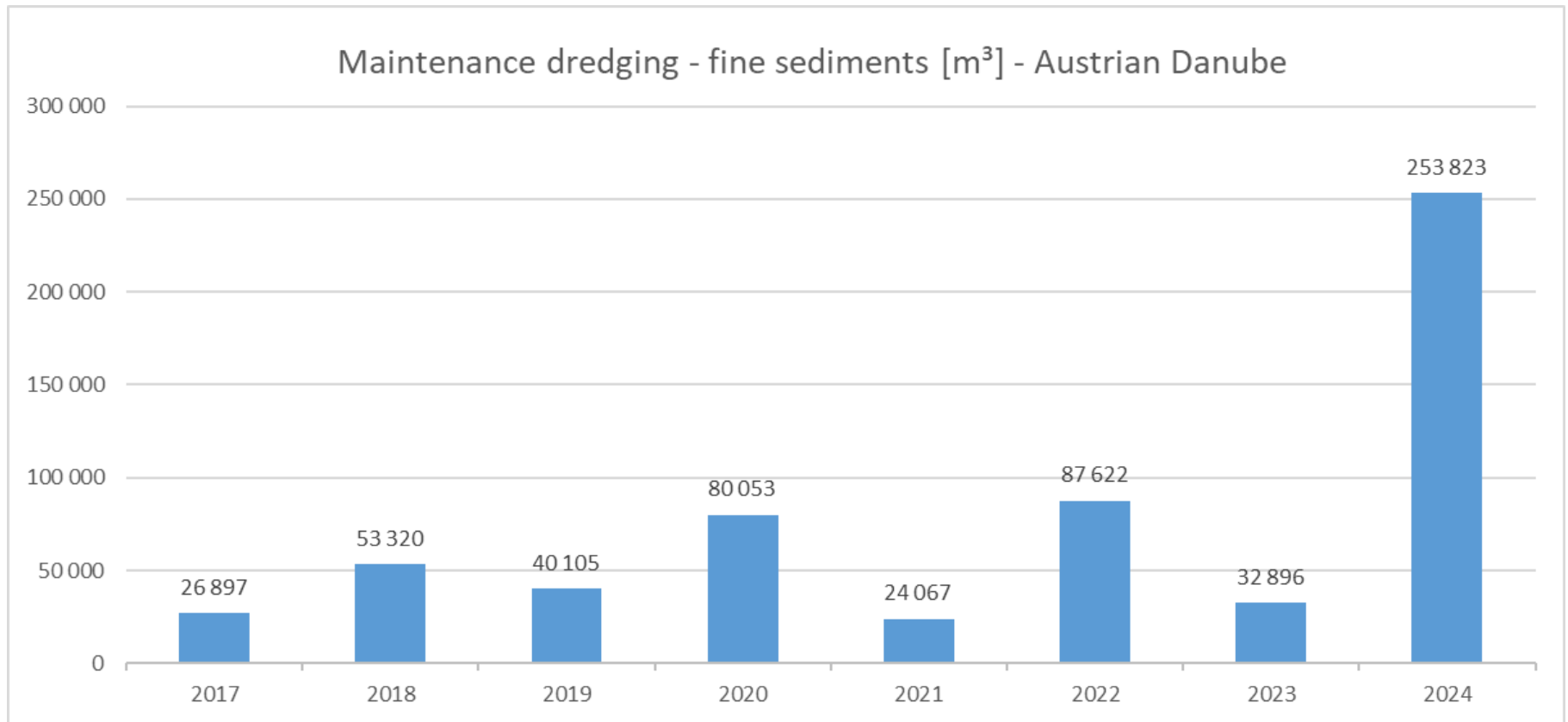
Maintenance activities 2024

Dredging activities 2017-2024 – free-flowing section Wachau



Maintenance dredging activities 2024 (fine sediments) **viadonau**

Dredging activities 2017-2024 – Austrian Danube



Planned activities to ensure navigation in 2025

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- Activities to be defined in detail until the **dredging briefing session taking place in June/July 2025** in coordination with the Supreme Navigation Authority (well in advance to the low water period)
- **Maintenance dredging (fords):** Up to 80 000 m³ of gravel in fords in the two free-flowing sections of the Austrian Danube (Wachau and Danube east of Vienna); up to 150 000 m³ of fine sediments for access to public ports and mooring sites (estimation)
- **Managing of bedload traps:** Dredging and upstream dumping of up to 130 000 m³ of gravel to mitigate riverbed erosion in the free-flowing section of the Danube east of Vienna; the bedload traps cover the area of two important fords (Hainburg and Treuschütt).

Planned activities to ensure navigation in 2025

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Flexible infrastructure elements (2nd round of pilot implementation)



Project area: Rote Werd (river-km 1896,0)



Co-funded by
the European Union

FAIRway//
Danube



Planned activities to ensure navigation in 2025

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Flexible infrastructure elements (2nd round of pilot implementation)



Project area: Rote Werd (river-km 1896,0)



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Operational expenditures for conducted activities in 2024 and budget needs in 2025

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Need areas	Operational expenditures	Operational expenditures	Operational expenditures	Operational expenditures	Operational expenditures	Operational budget
	2020	2021	2022	2023	2024 (provisional)	2025
Minimum fairway parameters (width/depth) ¹ (maintenance dredging)	2 158 797	2 209 995	2 452 921	2 566 324	4 082 370	2 506 902
Surveying of the riverbed	879 431	867 800	936 998	1 008 652	924 903	1 074 229
Water level gauges	1 048 584	1 007 054	1 119 734	1 253 557	1 010 725	1 195 116
Marking of the fairway	625 853	682 465	726 780	535 389	768 066	894 493
Information on water levels and forecasts	78 935	58 299	52 938	46 208	44 577	57 620
Sum (Euro)	4 791 600	4 825 613	5 289 371	5 410 130	6 830 641	5 728 360
Costs for dumping dredged material upstream ²	1 619 884	1 048 460	1 650 345	1 702 817	1 782 212	1 907 099
Costs of clearance of waterway after floods Sept. 2024					2 362 797	depending on demand
Costs of flexible low water regulation infrastructure					102 603	460 940
Grand total (Euro)	6 411 484	5 874 073	6 939 716	7 112 947	11 078 253	8 096 399
1 This amount includes only dredging expenditures, not the additional expenditures resulting from dumping the excavated material further upstream.						
2 Costs resulting from the dumping of excavated material further upstream.						

Team Waterway Management

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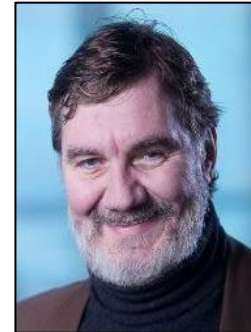


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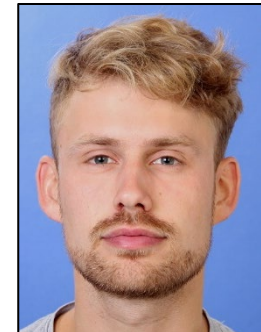


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