

# Comprehensive Flood Gauge Analysis Report

Gauge ID: GAUGE-94d9b996

Report Date: 2025-06-20

## Gauge Overview

Gauge Information	Value
Gauge ID	GAUGE-94d9b996
Gauge Name	Thames Tilbury Gauge 21

## Gauge Summary

Key Attribute	Value
Gauge Type	Ultrasonic gauge
Gauge Owner	Local Authority
Manufacturer	Stevens Water
Status	Temporarily offline
Certification	Fully certified
Historical High (m)	7.14
Flood Alert Level (m)	4.285 m
Flood Warning Level (m)	5.713 m
Gauge Age	12 years

# Sensor Details and Hardware Specifications

Gauge ID: GAUGE-94d9b996

## Gauge Information

Gauge Specification	Value
Data Source Type	SensorGauge
Gauge Owner	Local Authority
Gauge Type	Ultrasonic gauge
Manufacturer Name	Stevens Water
Installation Date	2013-06-23
Last Inspection Date	2023-06-27
Maintenance Schedule	Monthly
Operational Status	Temporarily offline
Certification Status	Fully certified

## Location Information

Location Attribute	Value
Latitude	51.510000
Longitude	-0.095000
Ground Level (m)	6.610 m

## Measurement Configuration

Measurement Parameter	Configuration
Measurement Frequency	30 minutes
Measurement Method	Automatic
Data Transmission	Automatic
Data Curator	CEDA Archive
Data Access Method	WebInterface

## Historical Sensor Statistics

Statistical Measure	Value
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Historical High Level (m)	7.142 m
Date of Historical High	2023-08-18
Last Severe Level Exceeded	2024-09-02
Frequency of Severe Level Exceedance	Never

# Geographic Location and Context

Gauge ID: GAUGE-94d9b996

## Geographic Coordinates

Geographic Parameter	Value
Latitude	51.510000°
Longitude	-0.095000°
Ground Level Elevation	6.610 m above sea level

## Thames River Context

Thames Parameter	Value
Distance to Thames	On Thames River

## Location-Based Flood Risk Assessment

Risk Parameter	Assessment
Flood Risk Score	8/10
Risk Category	High
Last Assessment Date	2025-01-05

## Gauge Positioning Summary

Position Attribute	Description
Regional Position	North London area
River Position	Directly on Thames River
Location Risk Profile	High flood risk location

# Current Measurements and Operational Status

Gauge ID: GAUGE-94d9b996

## Measurement Configuration

Measurement Parameter	Configuration
Measurement Frequency	30 minutes
Measurement Method	Automatic
Data Transmission	Automatic
Data Curator	CEDA Archive
Data Access Method	WebInterface

## Gauge Operational Status

Status Parameter	Current State
Operational Status	Temporarily offline
Certification Status	Fully certified
Last Inspection	2023-06-27
Maintenance Schedule	Monthly

## Historical Measurement Statistics

Statistical Measure	Value
Historical High Level	7.142 m
Date of Historical High	2023-08-18
Last Severe Level Exceeded	2024-09-02
Severe Level Exceedance Frequency	0.000 m

## Current Readings

No current timeseries data available for real-time readings.

# Flood Stages and Alert Thresholds

Gauge ID: GAUGE-94d9b996

## UK Flood Stage Thresholds

Alert Level	Threshold (m)	Authority
Flood Alert	4.285 m	Department for Environment, Food and Rural Affairs
Flood Warning	5.713 m	Department for Environment, Food and Rural Affairs
Severe Flood Warning	6.785 m	Department for Environment, Food and Rural Affairs

## Threshold Analysis

Analysis Parameter	Value
Alert to Warning Range	1.428 m
Warning to Severe Range	1.071 m
Total Alert Range	2.500 m
Decision Authority	Department for Environment, Food and Rural Affairs

## Historical Threshold Exceedance

Exceedance Parameter	Historical Data
Historical High Level	7.142 m
Date of Historical High	2023-08-18
Last Severe Level Exceeded	2024-09-02
Severe Level Exceedance Count	0.000 m

## Current Status vs Thresholds

No current timeseries data available for threshold comparison.

# Flood Risk Assessment and Analysis

Gauge ID: GAUGE-94d9b996

## Overall Risk Profile

Risk Parameter	Assessment
Flood Risk Score	8/10 (Very High Risk)
Risk Category	High
Last Assessment Date	2025-01-05
Location Risk Factor	On Thames River (Highest Risk)

## Historical Risk Patterns

Historical Pattern	Analysis
Severe Level Frequency	No severe level exceedances recorded
Historical High Level	7.142m (Exceeded severe warning level)
Recent Activity	Recent severe level activity (within 1 year)

## Threshold Risk Analysis

Threshold Analysis	Risk Assessment
Alert Range Analysis	Moderate alert range (1.428m) - Standard escalation
Historical vs Threshold	Historical high exceeds severe level by 0.357m (Elevated risk)

## Current Risk Status

No current timeseries data available for real-time risk assessment.

# Comprehensive Data Summary

## Thames Tilbury Gauge 21 (GAUGE-94d9b996)

### Gauge Overview Summary

Summary Parameter	Value
Gauge Type	Ultrasonic gauge
Manufacturer	Stevens Water
Operational Status	Temporarily offline
Installation Date	2013-06-23
Latitude	51.510000°
Longitude	-0.095000°

### Key Metrics Summary

Key Metric	Value	Significance
Historical High Level	7.142 m	Exceeds severe warning
Flood Alert Level	4.285 m	Initial warning threshold
Severe Warning Level	6.785 m	Critical action required
Flood Risk Assessment	8/10 (High)	Overall location risk
Severe Level Exceedances	Never	No severe exceedances

### Operational Status Summary

Operational Parameter	Status
Current Status	Temporarily offline
Certification	Fully certified
Measurement Frequency	30 minutes
Data Transmission	Automatic
Maintenance Schedule	Monthly

### Report Conclusions

- Location presents high flood risk requiring close monitoring
- No historical severe flood events recorded at this location
- Gauge meets certification standards for reliable flood monitoring



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