# Disaster Risk Warning as Blocked Tidal Channels Put the Kovalam-Nemmeli Coastal Wetland and South Chennai's Natural Defences in Danger

*Barriers across the Buckingham Canal, associated with the Mamallan Reservoir works, were found still in place on 16 October 2026, following our survey of 3 September 2026; the first of them is assumed to have been in place since March 2026. They cut the two-way water exchange that drains the wetland's catchment, buffers the coast and sustains its fishing communities.*

**Field Observation Report | Surveys of 16 October & 3 September 2026**

### Introduction

The main tidal channel of the Kovalam-Nemmeli coastal wetland, the Buckingham Canal, remains **blocked at three places**, raising the **risk of flooding and coastal surge** as the Northeast Monsoon commences. This report presents two field surveys by Wetland Conservation Network, conducted on 16 October 2026 and 3 September 2026. On 16 October, after IMD reported the commencement of Northeast Monsoon rainfall over Tamil Nadu, we found all three blockages still in place, **obstructing the natural flow of water**, with Blockage 1 further strengthened with mud after the breach documented on 3 September.

### Why this matters now

The Kovalam-Nemmeli coastal wetland works as one connected system: **rainwater from its catchment needs open routes to the sea, and tidal water needs routes in.** With its primary critical waterway, the Buckingham Canal, blocked, heavy monsoon runoff may be unable to drain and could accumulate in the low-lying land around the wetland, including the OMR corridor. A cyclone-driven surge would also meet a coastal buffer whose channels are obstructed. Sixteen fishing villages depend on the same tidal exchange for their livelihood.

Traditional fishing families of the Kovalam-Nemmeli coast have depended for generations on the tidal exchange between the sea, the Buckingham Canal and the wetland, which supports the habitat and breeding of fish, prawn and crab. With the canal blocked, fishers report that this exchange has been disrupted, and that catch and income in traditional fishing grounds have fallen over the past six months. These are our assessments; water levels and flow were not instrumentally measured on either survey date.

## Current Status of Buckingham Canal Blockages: Re-assessment on 16 October 2026

On 16 October 2026, we re-assessed all three Buckingham Canal blockages documented during the 3 September 2026 visit and found that all three remain intact, obstructing the natural flow of water in the wetland, even after IMD declared the commencement of the Northeast Monsoon over Tamil Nadu on 15 October 2026. The photographs below were taken on site, with GPS position and time recorded at capture. Blockage 1 appears to have been further strengthened with mud after the breach documented during the 3 September 2026 visit.




Buckingham Canal **Blockage 1** (12.755692, 80.230338), between Thiruvidanthai and Vada Nemmeli. Photographed on 16 October 2026. The mud bund across the canal appears strengthened after the breach documented on 3 September 2026.




Buckingham Canal **Blockage 2** (12.714247, 80.214202), near the Nemmeli-Thiruporur bridge. Photographed from the bridge on 16 October 2026. The blockage across the canal persists, with water standing on both sides.




Buckingham Canal **Blockage 3** (12.656948, 80.195703, approx), near Salavankuppam. Photographed on 16 October 2026. The Buckingham Canal remains blocked by a mud barrier; the blockage still persists.

All three blockages were present on both survey dates, 16 October and 3 September 2026, 43 days apart. On 3 September, Blockage 1 had already been breached, and Blockages 2 and 3 were in place. Blockage 1 is assumed to have been in place since March 2026. Full details of the 3 September survey follow.




**16 October 2026** **3 September 2026**

Buckingham Canal Blockage 1 (12.755692, 80.230338) on 16 October 2026 (left) and 3 September 2026 (right). The 3 September photograph was taken after the breach; the bund appears strengthened on 16 October.

*Source: IMD press release dated 15 October 2026 (mausam.imd.gov.in).*

# Baseline Documentation: Field Survey of 3 September 2026

The records below were made during our first field survey on 3 September 2026 and describe conditions on that date.

## Wetland Alteration - Waterway Blockage - New mud road construction

### Introduction to the 3 September 2026 Survey

This part of the report documents the first field visit conducted by Wetland Conservation Network on September 3, 2026, across the Kovalam-Nemmeli wetland complex, from the Muttukadu estuary in the north to Salavankuppam in the south. Our assessment recorded three blockages severing the Buckingham Canal's tidal exchange, active construction of the Mamallan reservoir continuing despite reports of an official halt, and a temporary mud road cut through seasonal marshland that has severed several natural inlet waterways, none of which appear in the project's proposal or planning documents as per our review. Considering Northeast monsoon, these findings raise serious concerns for the wetland's natural flood buffering capacity. The sections below present our site-wise photographic and video evidence, along with our questions to the Water Resources Department.

## Buckingham Canal Blockage 1: Stoppage of Tidal Influence

All photo evidence attached below was recorded on-site on September 3, 2026 by field ecological experts during direct assessment of the affected area.

Location: 12.755692, 80.230338




Buckingham Canal Blockage 1 (12.755692, 80.230338) - Between Thiruvidanthai and Vada Nemmeli

This photo shows the first blockage made on the Buckingham Canal. As of 3 September 2026, water ingress from Muttukadu – Kovalam estuary had breached the blockage and spread across the Kovalam Nemmeli wetland landscape (Paraval), including the adjacent lands.

Inset: A satellite image taken on 20th May 2026 clearly shows the blockage of the Buckingham Canal

Note: The structure was observed associated to the Mamallan project works. The purpose and authority for blockage construction should be confirmed by WRD and assumed to be blocked from March 2026.

Water from estuary side spread Videos (Taken on September 03, 2026):
https://drive.google.com/file/d/1uvQDKILIGxoba7hqeorb3LBPCm_QYfA4/view?usp=sharing ,
https://drive.google.com/file/d/1vQkRjs4b00XSEbPBmnHhD_RUcCiWN8KB/view?usp=drive_link )




A close-up photo showing a blockage made in the Buckingham Canal for Mamallan Reservoir Construction.
Inset: Satellite image showing the location of the Buckingham Canal blockage related to the Mamallan project



Water observed at the blockage location on 3 September 2026 seemed polluted.
Inset 1: Accumulation of foam seen along the water's edge at the blockage at Buckingham canal.
Inset 2: Location of water sample collection




Due to blockage the ingress water had entered the nearby peripheral private lands (assumed to be farmland). This photo shows the mud barrier built to prevent further intrusion of saline water into the private land. (Video: https://drive.google.com/file/d/1tur-YgZklyEjwDPs4ntyZmM8hNMWttkg/view?usp=drive_link )

## Buckingham Canal Blockage 2: Complete Disconnection and Destruction

Further south along the Buckingham Canal, near the Nemmeli-Thiruporur bridge, we identified a second blockage. On 3 September 2026, the canal was completely disconnected at this point, with multiple additional obstructions and alterations evident in the area. The first blockage appears to have been breached, while a second obstruction was observed further south near the Nemmeli –Thiruporur bridge. The spatial relationship between the two structures raises questions regarding whether the second structure was installed following the failure/breach of the first. The purpose, date and authority for the second obstruction should be confirmed by WRD. It appears intended to block the canal's natural tidal exchange and allow the Mamallan construction to proceed unimpeded. The other structures observed nearby appear connected to the Mamallan project's embankment and peripheral drain works.

Location: 12.714247, 80.214202




Buckingham Canal Blockage 2 (12.714247, 80.214202) – Near Nemmeli Thiruporur Bridge
Video: https://drive.google.com/file/d/1NgNSlYi2XlwkNRrE3CxbbwC2Qw0HsQGo/view?usp=sharing




The constructed structure (bund or peripheral drain) of the Mamallan reservoir was subsequently breached and almost submerged by water from the Muttukadu estuary, observed on the southern side of the Nemmeli-Thiruporur bridge.
Box: The constructed structure for the Mamallan project in their design plan
Video: https://drive.google.com/file/d/1a_NZumcTLOI8lVxmrugsBkb2H-Qs2idz/view?usp=sharing

## Buckingham Canal Blockage 3 - Near Salavankuppam

Near Salavankuppam also the Buckingham Canal has been blocked on southern side. Water was observed within the canal. Given the location and the documented connection of the wetland system to the southern Kokilamedu estuary, tidal influence is a possible source; however, flow direction and source were not instrumentally verified during this visit. We assess this manual blockage was constructed to facilitate the Mamallan reservoir works, and the Water Resources Department must urgently confirm the reason behind it. Beyond this, the area had witnessed drastic land use change, with the wetland systematically torn apart.
Location: 12.656948, 80.195703




Buckingham Canal Blockage 3 (12.656948, 80.195703 (approx)) – Near Salavankuppam
Video: https://drive.google.com/file/d/1oBdJDn38S1HxGInKJHI2zY2iicCAgwqx/view?usp=sharing




Mamallan Peripheral Drain Near Salavankuppam (12.657750, 80.197892)
Video: https://drive.google.com/file/d/1RWWICjeez-wJVRu33fFjNyXVwP6DseWA/view?usp=sharing

## Active Construction of Mamallan reservoir

While news reports claimed that the Mamallan reservoir project had been halted pending review by a high-level committee examining its design, our field study on 3 September 2026 revealed a contradictory reality: construction was continuing at the southern end, near Salavankuppam. At the northern end, near Kovalam, however, work had been assumed **forcibly stopped**, not by administrative order, but by the accumulation of estuarine water that had made continuation physically impossible.

This on-ground evidence points to a project confronting serious hurdles even during its construction phase. Notably, this includes the multiple blockages engineered across the waterways, interventions that find no detailed mention in the project's proposal or planning documents. The gap between what is officially reported and what is actually happening on the ground raises serious questions about the transparency, accountability and sustainable operation of this project.

Location: 12.668959, 80.198477




Heavy machinery excavation was actively underway on 3 September 2026 for the construction of the Mamallan Reservoir (12.668959, 80.198477 (approx) between Pattipulam and Salavankuppam), including peripheral drain deepening, embankment formation, and the blocking of the Buckingham Canal.

Video: https://drive.google.com/file/d/1yf3rqg3mREA1pYH1flao5EEBT1OEsCt1/view?usp=drive_link



Close-up photographs from the location show excavators actively operating on September 03, 2026

## Muttukadu Estuary Status (3 September 2026)

It is important to note that on 3 September 2026 the Muttukadu-Kovalam estuary was silted, with tidal influence relatively low. Yet even under these subdued conditions, we observed considerable water ingress, compounded by inflow from surrounding areas and the wetland's saturation from recent rainfall, factors already contributing to the problems documented above.

If the estuary mouth were to open fully, sea ingress would intensify dramatically. Should the existing blockages remain in place through the upcoming Northeast monsoon, and should this region face flooding or a coastal surge during that period, the consequences for surrounding areas could be disastrous.




Video: https://drive.google.com/file/d/1FgPciHDI3c-BRLZKAPEoj9KE57-noinb/view?usp=sharing

## Temporary Elevated Road Constructed Across Nemmeli Wetland
## Purpose and Authorisation to be Clarified?

Beyond the land use change already caused by the ongoing Mamallan reservoir construction, and despite mounting opposition to the project, we have come to know of a development that further destroys this Nemmeli wetland.

A temporary elevated mud road has been laid directly over the seasonal marshland, cutting across and blocking several natural inlets of the Nemmeli wetland from Manamathy group of lakes.

This road is assumed to have been laid for the Water Resources Minister's field inspection visit to the western boundary of the Mamallan project, running from Old Mamallapuram Road to the project site. Official signage at the site (dated 07-07-2026) confirms this visit was tied to the department's own review of the reservoir, a review now being conducted through infrastructure that itself fragments the very wetland it is meant to assess.

If a ministerial inspection meant to evaluate the project's impact required cutting a new access road through the fragile ecosystem under scrutiny is deeply troubling. We raise this directly to the Water Resources Department: for what purpose was this road constructed, when will it be removed, and when will the wetland be allowed to return to its natural state, with its blocked inlet waterways restored to their original flow?

If it is argued that this road was laid for carrying the construction work why it was not captured in any of the project proposal, what is the Environment Impact Assessment made for it and first of all why such comfortable stabilised road required for carrying construction work?




Mud road constructed away from project area blocking several natural inlet waterway from Manamathy group of lakes.




Minister visit Site (At the bund seen behind)
Video: https://drive.google.com/file/d/1KtTQWegyYjVHQfy5nmjjHhwEmkrcRrrp/view?usp=sharing




Unnecessary unaccounted Land use change near Minister Visit site adjacent to mud road




One of several Inlet canal blocked (12.660691, 80.190874)

## Summary and Demands

Our field surveys of 16 October and 3 September 2026 confirm extensive, undocumented alteration of the Kovalam-Nemmeli wetland in connection with the Mamallan reservoir project: three blockages at Buckhimgam canal present on both dates, construction that was continued despite a reported halt, and a road cut severing wetland inlets (both observed on 3 September).

In our assessment, these blockages raise the flood and coastal surge risk for the low-lying areas around the coastal wetland and call for immediate action to prevent flooding during the Northeast monsoon. With the Northeast monsoon now commenced, and El Niño conditions in place, we urge the Water Resources Department and Tamil Nadu Wetlands Mission, together with the district administration and the Fisheries and Fishermen Welfare Department, to:

1. Inspect all documented canal blockages and **remove them without delay to restore drainage and tidal flow**, bringing this brackish wetland back to its original state.
2. **Clarify the basis** on which these works were carried out, given their absence from the project's proposal, design plans, or EIA as far as we have reviewed.
3. **Inspect the mud road**, confirm the basis for its construction, and **remove it to restore freshwater inlet flow** from the Manamathy group of lakes, reconnecting all severed inlet waterways to their original state without delay, as the monsoon has now commenced.
4. Release the status of the high-level committee's design review, given the gap between official reports and our field evidence.
5. Ensure no further land use change or obstruction of waterways occurs in this area without a proper EIA and necessary approvals.
6. Have the Fisheries and Fishermen Welfare Department assess the loss to fisheries and traditional fishing grounds caused by the blockages, and compensate the affected fishing families.

### Note on Scope and Limitations

This report is based on field surveys, conducted on betweem 3 September 2026 and 16 October 2026, and reflects conditions observed on those dates. The 16 October survey covered the three Buckingham Canal blockages only; construction activity and the mud road were last documented on 3 September 2026. Water levels, tidal influence, and construction activity in this landscape can change rapidly with tides, rainfall, and ongoing works, so some observations, particularly those marked as assumptions or assessments, may require further verification through follow-up visits, official records, or laboratory analysis.