

KACHHI CANAL PROJECT (PHASE-I)

(RD 0+000 to RD 1005+000)

FLOOD CONTINGENCY PLAN – MONSOON 2024

Kachhi Canal off takes from the right side of Indus River at Taunsa Barrage and passes through Districts Muzaffargarh, Dera Ghazi Khan, Rajanpur in Punjab and Districts Dera Bugti, Naseerabad, Bolan & Jhal Magsi in Balochistan. The command area of the Project lies in Balochistan Province. The main objective of the Project is to provide sustainable irrigation water supply to 713,000 acres of agricultural land of Districts Dera Bugti, Nasirabad, Bolan & Jhal Magsi of Balochistan Province.

After off-taking from the Indus River on right bank of Taunsa Barrage, Kachhi Canal passes through a narrow strip in between the Koh-e-Suleman Mountain Range and Indus River. Along its way, the canal alignment encounters crossing of a large number of hill torrents. Out of around 200 hill torrents originating from Koh e Suleman Range, thirteen (13) are major Hill torrents situated in D.G Khan and Rajanpur Districts i.e. Kaura, Vehowa, Sanghar, Shori Lund, Vidore, Sakhi Sarwar and Mithawan are in DG Khan District, whereas, Kaha, Chachar, Pitok, Sori Shumali, Zangi and Sori Janobi are in Rajanpur District.

For safe and uninterrupted passage of the floods of these Hill Torrents / Nullahs across the Kachhi canal, a number of Cross Drainage Structure (CDS's) have been provided. WAPDA has constructed 73 Nos. Cross Drainage Structure on Kachhi Canal i.e. 63 in Punjab and 10 in Balochistan Province whose discharge varies between 700 to 30,000 Cusecs.

As experienced during the Floods of 2010, 2012, 2013 and 2022, the hill torrent flows from these Nullahs are the major reason and threat causing catastrophic damages to Kachhi Canal. The ultimate remedy to safeguard the Kachhi Canal as well as the public life and property in the project area lies in the carrying out of the permanent Hill Torrent Management Works over these Hill Torrents, which specifically is the domain of the provincial Irrigation Department of Punjab.

However, keeping in view of the experience of these past floods, following measures have been encapsulated by the Kachhi Canal project authorities for effective monitoring and management of flood emergencies to prevent any further damages to the Kachhi Canal during the current monsoon season 2024.

1. WATCH AND WARD OF THE CANAL

The watch and ward staff have been notified and deployed for monitoring of the vulnerable locations / Hill Torrent X-ings of Kachhi Canal during the complete monsoon

period upto September-2024 (**Annex-I**). The staff will be responsible for collecting information regarding Flood and watch and ward during the Flood flows at the vulnerable locations and the critical X-drainage Structures. The staff shall also communicate the daily Flood report during the flood season for appraisal of high ups.

2. ESTABLISHMENT OF FLOOD CONTROL ROOM

An emergency Control Room has been established in the office of General Manager / PD Kachhi Canal Project Dera Ghazi Khan for effective coordination and liaisoning with all the stakeholders as well as collection / communication of Flood related information among all allied departments including local civil administration, Flood warning Centers, Irrigation Authorities Govt. of Punjab/Balochistan, WAPDA and MoWR etc (**Annex-II**).

3. SURVEY OF CROSS DRAINAGE STRUCTURES

Keeping in view the past experience especially during the Floods of 2022 which caused devastating damages to Kachhi Canal due to encroachments and non-rehabilitation of natural routes, a detailed survey of routes of Cross Drainage Structures constructed over Kachhi Canal have been carried out. Accordingly, the data with regards to encroachments on the routes of Hill Torrent Structures have been compiled and communicated to the local administration and Irrigation Authorities to carry out measures for removing illegal encroachments / zamidara bunds constructed over the natural routes of Hill Torrents to safeguard the public and property from any damages (**Annex-III**).

In addition to above, due to non-availability of owned machinery by the Kachhi Canal, the emergency contact numbers of the private machinery holders (Dumpers, Loaders and Excavators) and necessary contact numbers of the vendors have been arranged in case of emergency to carry out Killa Bushing, arrangement of Sand bags, procurement of Stone material and borrow pit excavations for earthwork etc to meet any emergent situation arising during the floods.



PAKISTAN WATER & POWER DEVELOPMENT AUTHORITY

Ph: No. 064/2689040
No. 064/2689041
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O/o General Manager /PD
Kachhi Canal Project Wapda Colony
Indus Highway, Taunsa Peshawar Road
Near Toll Plaza, Dera Ghazi Khan.

No. GM/PD/KCP/DGK/ 10 /1267

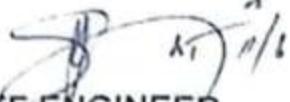
Dated: 11/06/2024

OFFICE ORDER

In order to make upcoming pre-monsoon /rainy season-2024 arrangement, following three number committees of the officers / officials are hereby constituted under supervision of Superintending Engineer, KCP, D G Khan to make necessary arrangement to avoid any untoward situation and ensure vigilant monitoring of Kachhi Canal.

Sr. No.	Reach	Name of Officer	Designation	Mobile Numbers
1	(RD 0+000 to RD 1005±)	Ahmed Zain Ul Abedin Incharge	Executive Engineer	0334-9596923
	RD 0+000 to RD 531±	Abdul Qudeer Wakeel Haider	Sub Engineer Surveyor	0331-4980431 0325-6408892
2	RD 531± to RD 785±	Naseer Ahmed Waqar Ali Channa Muhammad Mudassir	Sub Engineer ARO R.A	0333-7743702 0332-2709592 0333-1275075
3	RD 785± to RD 1005±	Ghulam Qadir Dherajo Shahid Irfan	AXEN Sub Engineer	0300-3591708 0332-7818402

The Committees should also keep close liaison with Punjab Irrigation Department and local administration for smooth passing of Hill Torrent flood water from the structures.


CHIEF ENGINEER
KACHHI CANAL PROJECT

Cc to:

1. General Manager/PD (KCP), Kachhi Canal Project, Wapda, D.G.Khan.
2. Commissioner, D.G.Khan Division, D.G.Khan.
3. Chief Engineer, Irrigation, D.G Khan Zone, D.G.Khan.
4. Superintending Engineer, Irrigation Project Circle, D.G.Khan.
5. Superintending Engineer, Derajat Canal Circle, D.G Khan.
6. Deputy Commissioner, D.G.Khan District, D.G Khan.
7. Deputy Commissioner, Rajanpur District Rajanpur.
8. Officers / officials Concerned.



PAKISTAN WATER & POWER DEVELOPMENT AUTHORITY
OFFICE OF THE GENERAL MANAGER/PD

Ph: No. 064/2689040
 No. 064/2689041
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 E-mail: pdkcp@yahoo.com

Kachhi Canal Project Wapda Colony
 Indus Highway, Taunsa Peshawar Road
 Near Toll Plaza, Dera Ghazi Khan.

No. GM/PD/KCP/DGK/36-W1/1324

Dated: 21/6/2024

OFFICE ORDER

In wake of prediction of excessive / abnormal rain falls conveyed by Metrological department Govt. of Pakistan, Emergency Flood Control Room has been established in the office of General Manager/PD Kachhi Canal Project, D.G.Khan, for effective coordination with all stakeholders i.e. office of Chairman WAPDA, Member (Water), Secretary Irrigation Department, Govt. of Balochistan and Punjab, concerned Commissioners and Deputy Commissioners, Irrigation Department, Law Enforcing Agencies as well as Local Civil Administration.

The Committee of following officers are hereby nominated for Emergency Flood Control Room.

Sr. No.	Name & Designation	Name & Designation of Assistant	Timing
1	Mr. Babar Ali Barohi, Director (H/Q) Cell No. 0333-7025897	Mr. Faisal Madni, Tracer Cell No. 0333-6461456	08:00 am to 08:00 pm
2	Mr. Khalid Hussain Meerani, Director (Tech.) Cell No. 0333-1338001	Mr. Shahid Hussain, Draftsman Cell No. 0332-6781186	08:00 pm to 08:00 am
3	Mr. Shahid Hussain, Care Taker Cell No. 0332-7355711	For necessary Arrangements	

The committee shall furnish flood / rainfall report to High ups of WAPDA twice a day (09:30 AM & 04:00 PM) through email / WhatsApp regularly.

Leave are not allowed during Monsoon Season-2024.


CHIEF ENGINEER
KACHHI CANAL PROJECT

Cc to:

1. Member (Water), WAPDA, WAPDA House, Lahore.
2. Secretary Irrigation Department, Govt. of Balochistan, Quetta.
3. Secretary Irrigation Department, Govt. of Punjab, Lahore.
4. General Manager (C&M), Water, WAPDA, WAPDA House, Lahore
5. Commissioner, D.G.Khan, Division, D.G.Khan.
6. Commissioner, Naseerabad Division, Naseerabad.
7. Commissioner, Sibi Division, Sibi.
8. Chief Engineer, Irrigation, D.G.Khan Zone, D.G.Khan.
9. Chief Engineer, (Canal) Irrigation, Balochistan, Quetta.
10. SO to Chairman WAPDA, WAPDA House, Lahore.
11. Deputy Commissioner, D.G.Khan / Rajanpur.
12. Deputy Commissioner, Naseerabad, Sohbatpur / D.M.jamali & Dera Bugti.
13. Superintending Engineer, KCP, D.G.Khan (0321-5426974)
14. Superintending Engineer, KCP Remaining Works, D.M.jamali (0333-7100614)
15. Committee Members.
16. Master File.

They are directed for vigilant monitoring & coordination with Committee & Local Civil Administration.



PAKISTAN WATER & POWER DEVELOPMENT AUTHORITY
OFFICE OF THE GENERAL MANAGER/PD

Ph: No. 064/2689041

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No. GM/PD/KCP/DGK/38-W/1484

Kachhi Canal Project
Wapda Colony, Indus Highway
Near Toll Plaza, Taunsa Peshawar Road
Dera Ghazi Khan

Dated: 04/07/2024

**Director General (PDMA),
Jail Road, Shadman-II,
Lahore.**

**Subject: KACHHI CANAL PROJECT, RESTORATION OF FLOOD DAMAGES 2022
CLEARANCE OF NATURAL ROUTES OF HILL TORRENTS**

Ref: Briefing on Kachhi Canal in the office of Commissioner D.G.Khan & Site visit on 01.07.2024.

It is apprised that after off-taking from the Indus river on right bank of Taunsa Barrage. The Kachhi Canal is aligned parallel to and on the right side of existing D.G.Khan canal and its Dajal Branch and then as an independent canal upto the command area in Balochistan. On its way from Head Taunsa Barrage Punjab to Balochistan Province, Kachhi Canal passes through a narrow strip in between the Koh-e-Suleman Mountain Range and Indus River. Along its way, the canal alignment encounters crossing of a large number of hill torrents.

About 200 hill torrents originate from Koh-e-Suleman range and spread over in canal command area of DG Khan & Rajanpur Districts after crossing Pachad area. These streams outfall in Indus river stretched in reach of 57 miles upstream (U/S) of Taunsa Barrage to 5.5 miles U/S of Guddu Barrage. Out of these 200 hill torrents, thirteen (13) are major hill torrents situated in DG Khan & Rajanpur Districts i.e. Kaura, Vehowa, Sanghar, Sori Lund, Vidore, Sakhi Sarwar and Mithawan are in DG Khan District, whereas, Kaha, Chachar, Pitok, Shori Shumali, Zangi and Shori Janobi are in Rajanpur District.

In this regard, it is apprised that due to unprecedeted heavy rainfalls / floods during July-August 2022, severe damages occurred to Kachhi Canal. Flash floods from hill torrents which rendered a number of breaches to Kachhi Canal at various locations in District DG Khan & Rajanpur.

It is very important to mention here that discharge of hill torrents has a very limited time and due to encroachment and cultivation on the natural routes of nullahs. The flood water did not pass through the structures. The flood water inundated on the R/S flood protection bund (FPB) and becomes sheet flow. The local living on the U/S side of FPB did not wait and made forced cuts and breaches in Kachhi Canal to pass the water from their lands. Around 90% cuts in Kachhi Canal are forcible. The canal is non operational since July -2022.

For Restoration / Repair of Kachhi Canal PC-I was prepared and submitted to MoWR in November 2022. PC-I for "Restoration of Flood Damages-2022" was approved by ECNEC and administrative approval was issued by MoWR in July 2023.

It is pertinent to mention here that the process of procurement was completed in November 2023, but due to 15 % higher bidding cost the works could not awarded. Subsequently 1st revised PC-I was prepared on the basis of lowest evaluation bids and submitted to MoWR in December 2023.

Furthermore, permission was requested from MoWR for release of fund and award of works which is still awaited. During this period, MoWR emphasis on integrated management of hill torrents & safe disposal of flood water to Indus River.

At present to save the livelihood and to avoid untoward situation during rainfalls. It is necessary to make following arrangements.

- Rehabilitation / channelization of natural routes of flood channels / nullahs in District DG Khan & Rajanpur be carried out by Irrigation Deptt. of Govt. of Punjab with the coordination of Local Government.
- Punjab Irrigation Department should ensure removal of all man-made earthen plugs in torrents made by locals and clearance of encroachments like cultivation, houses etc on the U/S and D/S of cross drainage structures in District DG Khan & Rajanpur for safe disposal of water to river Indus through natural waterways.

Accordingly, this office conducted survey of encroachment and hindrances in the natural routes of hill torrents last year. The detail of encroachment and goggle maps are attached as **Annex-A**.

In view of above, it is requested to direct concern departments (Irrigation & Local Govt. etc.) for clearance of natural routes of hill torrents for safe disposal of flood water during upcoming monsoon season on top priority basis.


4/7/24
CHIEF ENGINEER
KACHHI CANAL PROJECT

C.C.To:

1. The Secretary, Govt. of the Punjab, Irrigation Department, Lahore.
2. The Secretary, Irrigation Department, Govt. of Punjab (South), Bahawalpur.
3. Commissioner, D G Khan Division, D.G. Khan.
4. Chief Engineer, Federal Flood Commission, Islamabad.
5. Deputy Commissioner, D.G. Khan.
6. Deputy Commissioner, Rajanpur.
7. Additional Commissioner, D.G. Khan.
8. Superintending Engineer, Kachhi Canal Project, WAPDA, D.G.Khan.
9. Superintending Engineer, Project Circle (Irrigation) D.G.Khan.
10. Executive Engineer, Jampur Construction Division, Rajanpur.
11. Executive Engineer, Kachhi Canal Project, Rajanpur.
12. Master File.

KACHHI CANAL PROJECT
X-DRAINAGE STRUCTURES (FROM RD 0+000 ~ RD 1005+000)

Sr. No.	Location	Structure Type	Source Of Nullah (Hill Torrent)	Discharge Capacity (Cusecs)	Remarks
1	50+817	Super Passage	SoriLund	5,000	<ul style="list-style-type: none"> Cultivation by Resident of Ghuman Village @ u/s of structure Cultivation by Resident of Basti Haiderani @ d/s of structure Earthen Ramp constructed by local on U/S of structure between guide bank for their movement Road culvert on u/s of structure (Distance 1.6 Km to Kachhi Canal).
2	82+250	Super Passage	SoriLund	5,000	<ul style="list-style-type: none"> Cultivation by Resident of Basti Raiman @ u/s of structure Cultivation by Resident of Basti Muryani @ d/s of structure Basti Muryani on D/S of structure
3	108+225	Super Passage	SoriLund	2,000	<ul style="list-style-type: none"> Cultivation by Resident of Basti Azeem Wala @ u/s of structure Cultivation by Resident of Basti Banda Wala @ d/s of structure
4	143+550	Syphon	SoriLund	1,500	<ul style="list-style-type: none"> Cultivation by Resident of Basti Salar Cha Korra Khan @ u/s of structure Cultivation by Resident of Basti Bahadur Garh @ d/s of structure Basti Bahadur Garh @ D/S of structure
5	156+075	Super Passage	SoriLund	1,000	<ul style="list-style-type: none"> Cultivation by Resident of Basti Goragh @ U/S of structure Cultivation by Resident of Basti Shahrani @ D/S of structure Basti Shahrani @ D/S of structure
6	185+619	Super Passage	Vidhore	4,000	<ul style="list-style-type: none"> Cultivation by Resident of Basti Gajoji @ U/S & D/S of structure
7	241+717	Super Passage	Vidhore	4,000	<ul style="list-style-type: none"> Earthen bund @ u/s (Dist. 200 ft) Addl. Structure under construction by Irrigation Department Punjab
8	279+200	Super Passage	SakhiSarwar	2,000	<ul style="list-style-type: none"> Cantonment D G Khan @ U/S of Structure Cultivation by Sardar Jafar Leghari @ D/S of structure
9	316+464	Super Passage	Mithawan	7,000	<ul style="list-style-type: none"> Cultivation by Ramzan Buzdar @ U/S of structure Cultivation by Allah Diwaya Bugiani @ D/S of structure Basti Jogyan @ D/S of structure
10	365+000	Super Passage	Mithawan	1,400	<ul style="list-style-type: none"> Cultivation by Resident of of Basti Rohail Wala @ U/S of structure Cultivation by Resident of of Basti Khan Kalalri @ D/S of structure Katcha Road to Basti Rohail wala @ U/S of structure
11	377+500	Nullah Culvert	Mithawan	6,000	<ul style="list-style-type: none"> Cultivation by Maqsood Khan Leghari on U/S & D/S of structure
12	425+630	Syphon	Kaha	10,000	<ul style="list-style-type: none"> Cultivation by Resident of Basti Hazoor Bux Hanbhi @ U/S of structure Basti Hazoor Bux Hanbhi @ U/S of structure
13	441+195	Syphon	Kaha	700	<ul style="list-style-type: none"> Cultivation by Inayat Ullah Khoja @ U/S of structure Dajal City @ D/S of structure
14	455+390	Super Passage	Kaha	1,000	<ul style="list-style-type: none"> Cultivation by Mujahid Shah @ U/S of structure
15	468+860	Syphon	Kaha	5,000	<ul style="list-style-type: none"> Cultivation by Resident of Basti Khalilani @ U/S of structure Shops of Khuda Bux @ D/S of structure
16	489+965	Syphon	Kaha	7,000	<ul style="list-style-type: none"> Cultivation by Farukh Korai @ U/S of structure Structure damaged on Dajal Branch @ D/S of structure
17	534+854	Syphon	Chachar wah	1200	<ul style="list-style-type: none"> Cultivation by Resident of Bhakhar Pur @ U/S of structure
18	633+050	Super Passage	Chezagi	2890	<ul style="list-style-type: none"> Earthen Bund for Cultivation purpose (Dist. 400 ft from Kachhi Canal) @ d/s of structure Earten bund (Dist. 730 ft) @ u/s of structure
19	639+200	Super Passage	Pitok-I	15300	<ul style="list-style-type: none"> Earthen bund (Dist. 800 ft from Kachhi Canal) @ d/s of Structure
20	706+740	Super Passage	Tuzani	5700	<ul style="list-style-type: none"> Earthen bund for cultivation purpose (Dist. 550 ft from Kachhi Canal) @ u/s & d/s of Structure
21	838+000	Super Passage	KAHIR	2745	<ul style="list-style-type: none"> Earthen bund for cultivation purpose (Dist. 550 ft from Kachhi Canal) @ u/s of Structure



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Kachhi Canal Project
Wapda Colony, Indus Highway
Near Toll Plaza, Taunsa Peshawar Road
Dera Ghazi Khan

No. GM/PD/KCP/DGK/ 38-W/1620

Dated: 18/07/2024

Deputy Commissioner,
D.G. Khan

Subject: KACHHI CANAL PROJECT, RESTORATION OF FLOOD DAMAGES 2022
CLEARANCE OF NATURAL ROUTES OF HILL TORRENTS

Ref: Briefing on Kachhi Canal in the office of Commissioner D.G.Khan & Site visit on 01.07.2024 & Meeting held on 15.07.2024.

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At present to save the livelihood and to avoid untoward situation during rainfalls and safeguard the public exchequer from further in future. It is necessary to make following arrangements.

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- Punjab Irrigation Department should ensure removal of all man-made earthen plugs in torrents made by locals and clearance of encroachments like cultivation, houses etc on the U/S and D/S of cross drainage structures in District DG Khan & Rajanpur for safe disposal of water to river Indus through natural waterways.

Accordingly, this office conducted survey of encroachment and hindrances in the natural routes of hill torrents last year. The detail of encroachment and goggle maps are attached as Annex-A.

In view of above, it is requested to direct concern departments (Irrigation & Local Govt. etc.) for clearance of natural routes of hill torrents for safe disposal of flood water during upcoming monsoon season on top priority basis to avoid threats to public and Kachhi canal.


18/7/24
CHIEF ENGINEER
KACHHI CANAL PROJECT

C.C.To:

1. The Secretary, Govt. of the Punjab, Irrigation Department, Lahore.
2. The Secretary, Irrigation Department, Govt. of Punjab (South), Bahawalpur.
3. Commissioner, D G Khan Division, D.G. Khan.
4. Chief Engineer, Federal Flood Commission, Islamabad.
5. Deputy Commissioner, Rajanpur.
6. Additional Commissioner, D.G. Khan.
7. Superintending Engineer, (Flood), FFC, Islamabad
8. Superintending Engineer, Kachhi Canal Project, WAPDA, D.G.Khan.
9. Superintending Engineer, Project Circle (Irrigation) D.G.Khan.
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