



**GOVERNMENT OF PAKISTAN
MINISTRY OF WATER AND POWER
PROJECT MANAGEMENT & POLICY IMPLEMENTATION UNIT (PMPIU)**

**Water Sector Capacity Building and Advisory
Services Project (WCAP)**

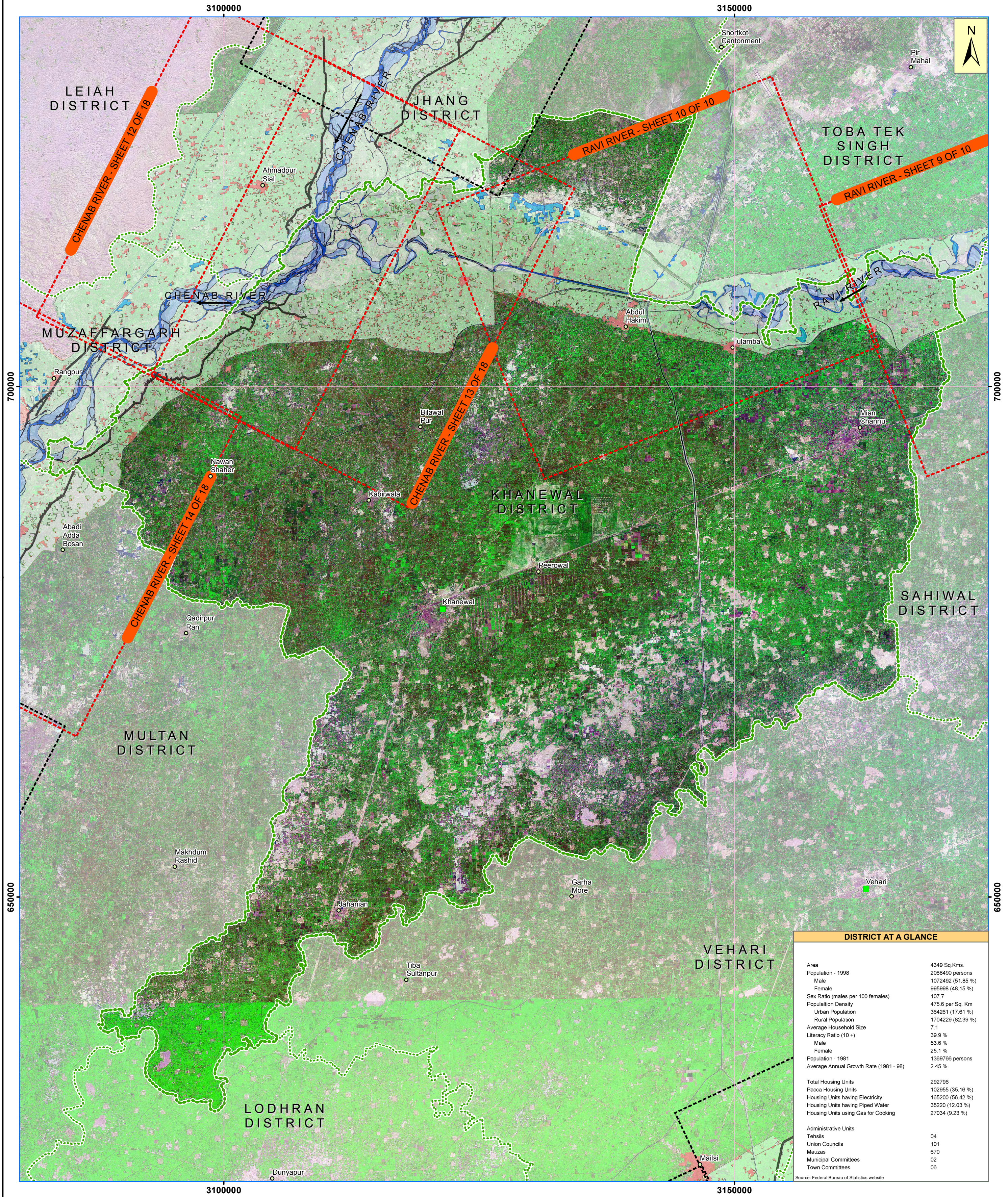
**Development of National Flood Protection Plan-IV (NFPP-IV)
and Related Studies to Enhance the Capacity of
Federal Flood Commission-FFC**

**LANDUSE AND
DISTRICT LEVEL SUBMERGENCE PLANS**

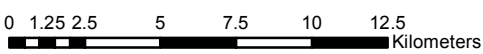
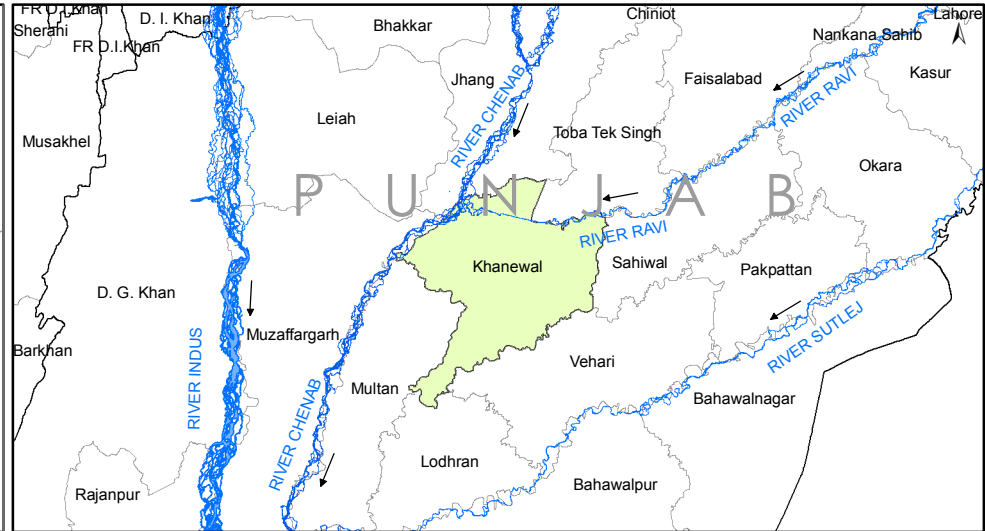
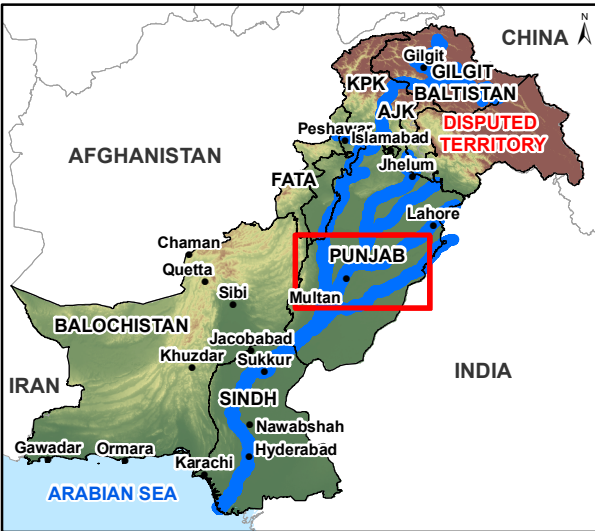
**DISTRICT KHANEWAL
PUNJAB PROVINCE**

JUNE 2015

KHANEWAL DISTRICT



DISTRICT AT A GLANCE	
Area	4349 Sq Kms.
Population - 1998	2068490 persons
Male	1072492 (51.85 %)
Female	995998 (48.15 %)
Sex Ratio (males per 100 females)	107.7
Population Density	475.6 per Sq. Km
Urban Population	364261 (17.61 %)
Rural Population	1704229 (82.39 %)
Average Household Size	7.1
Literacy Ratio (10 +)	39.9 %
Male	53.6 %
Female	25.1 %
Population - 1981	1369766 persons
Average Annual Growth Rate (1981 - 98)	2.45 %
Total Housing Units	292796
Pacca Housing Units	102955 (35.16 %)
Housing Units having Electricity	165200 (56.42 %)
Housing Units having Piped Water	35220 (12.03 %)
Housing Units using Gas for Cooking	27034 (9.23 %)
Administrative Units	
Tehsils	04
Union Councils	101
Mauzas	670
Municipal Committees	02
Town Committees	06



DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

KHANEWAL DISTRICT

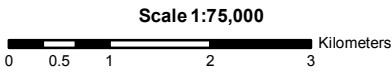
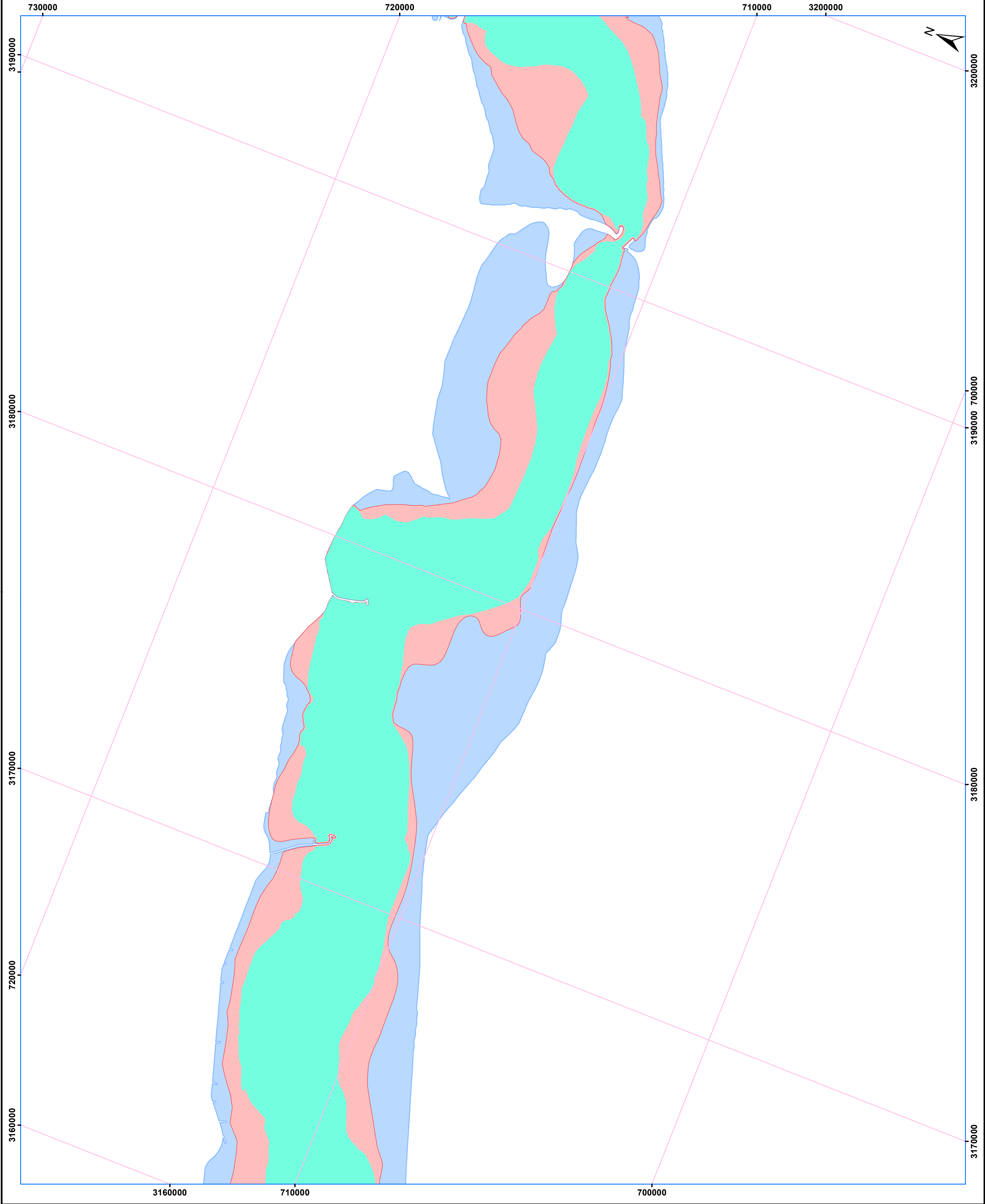
Client :
FEDERAL FLOOD COMMISSION
Ministry of Water & Power

Consultants:
NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED
1-C, Block-N, Model Town Extension,
Lahore - Pakistan.

in association with
DELTAES, THE NETHERLANDS

Rev.	Date:	Description	Ckd.	Ver.

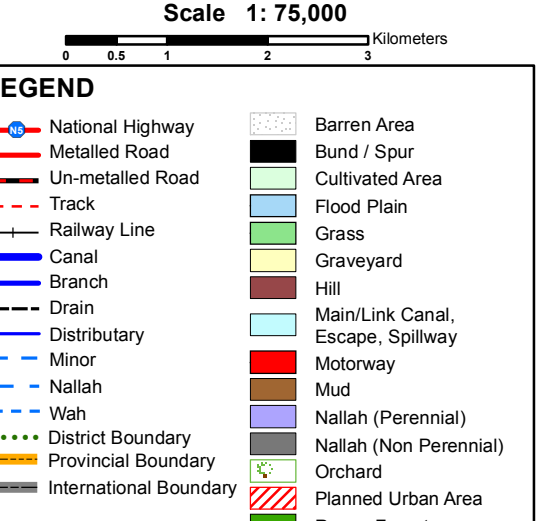
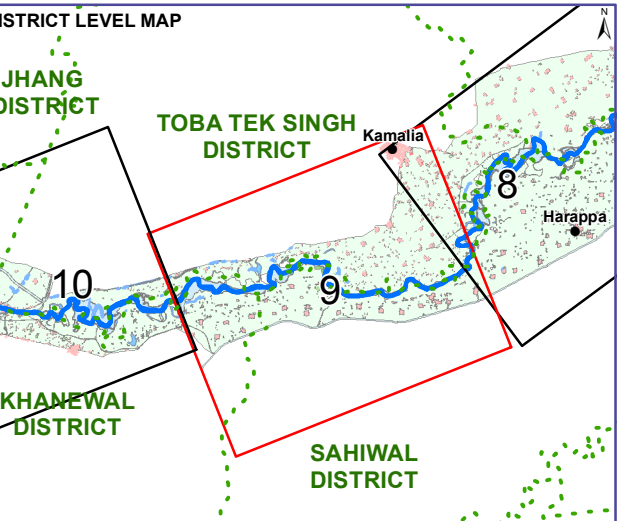
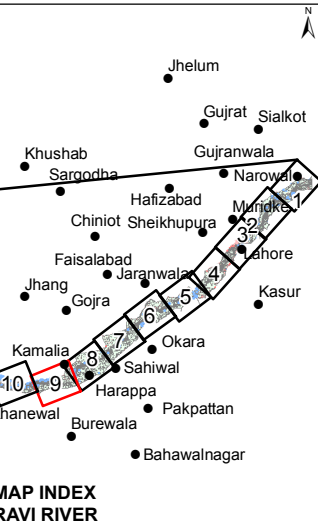
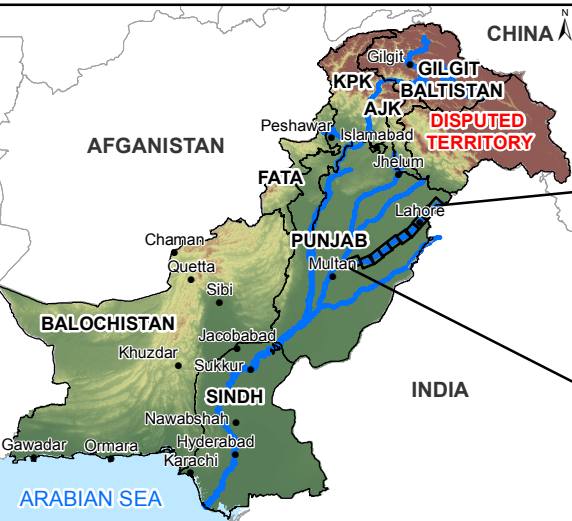
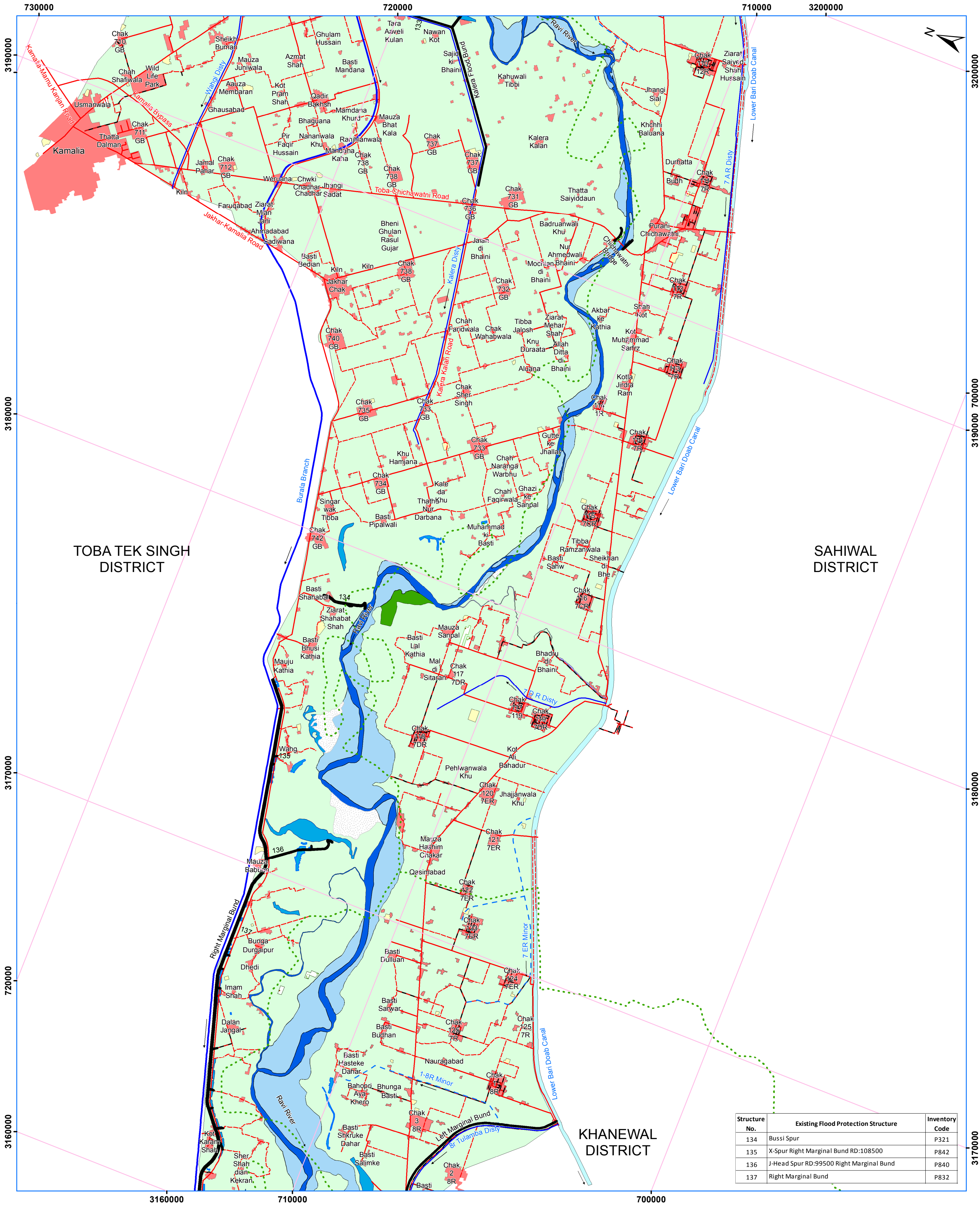
Source of Information: 1. Topographic sheets of Survey of Pakistan 2. Freely available satellite imagery	Coordinate System PROJECTION: Lambert Conformal Conic (LMPAK-I) , DATUM: WGS84 Grid Reference is in meters	Date: March 16, 2015
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LEGEND

- High Risk Zone (Inundation Extent Corresponding to discharge of 127,000 cusecs below Balloki)
- Medium Risk Zone (Inundation Extent Corresponding to discharge of 212,000 cusecs below Balloki)
- Low Risk Zone (Inundation Extent Corresponding to discharge of 300,000 cusecs below Balloki)

Note: All flood extents are based on breachless conditions



DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

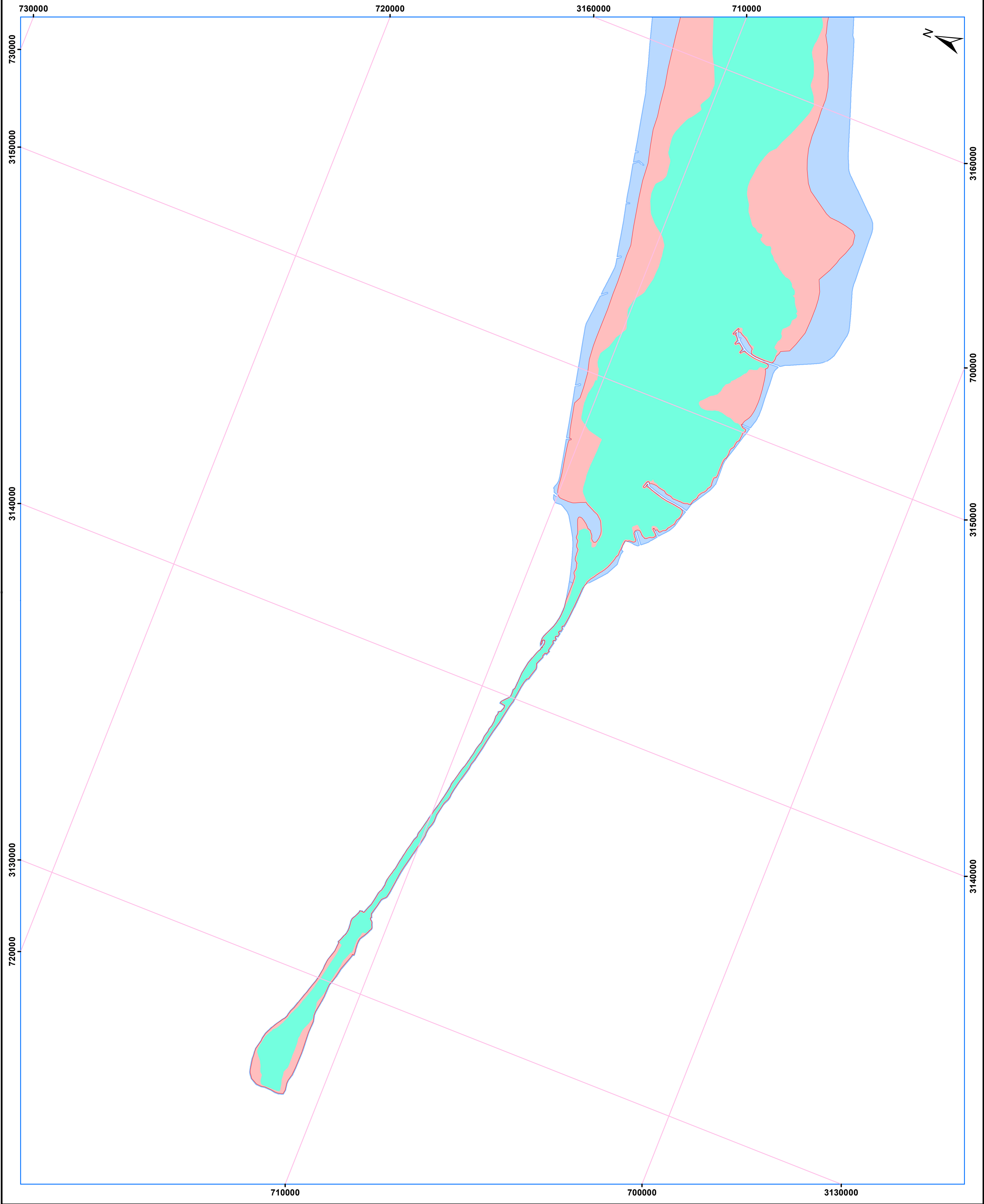
LANDUSE MAP RAVI RIVER

Client :
FEDERAL FLOOD COMMISSION
Ministry of Water & Power

Consultants:
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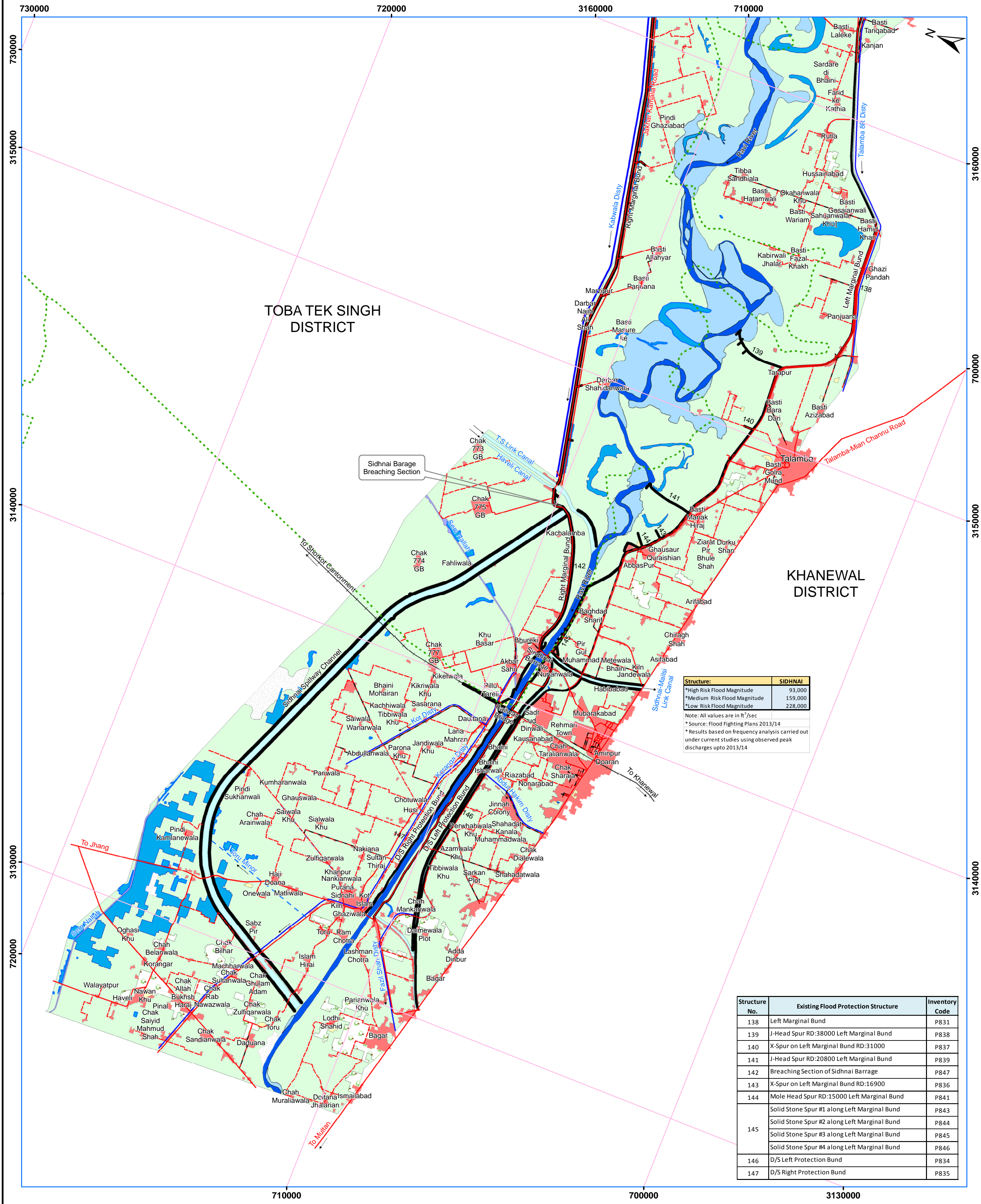


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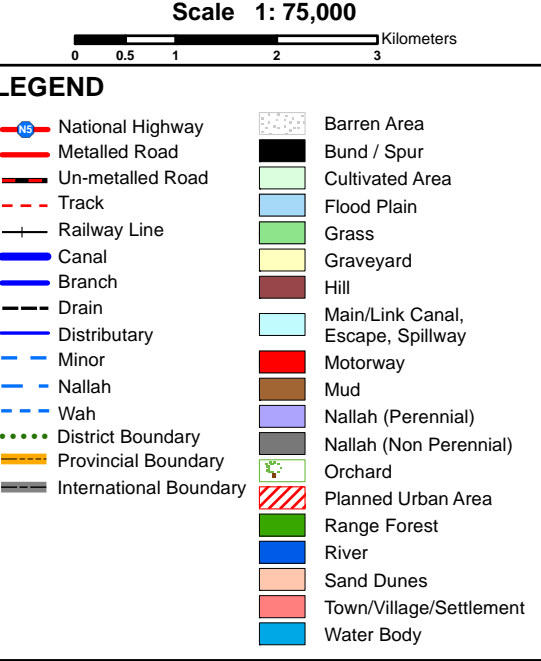
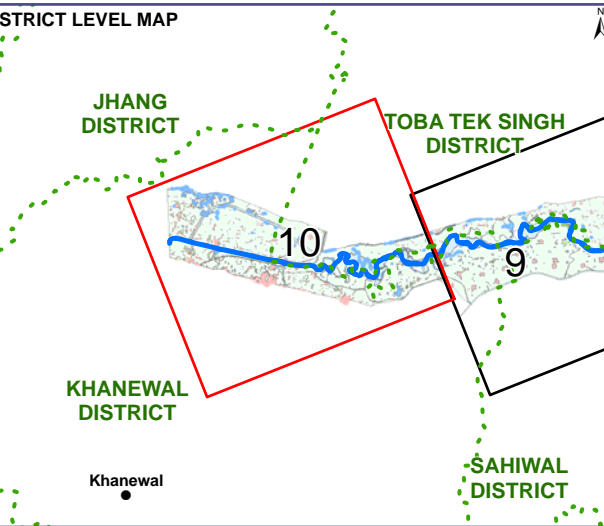
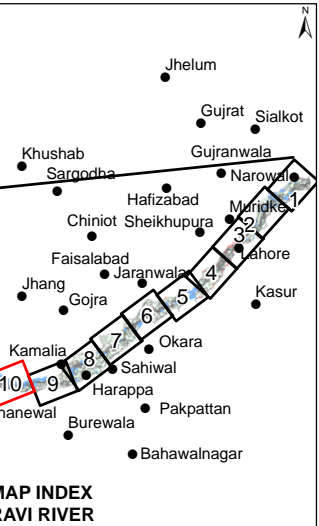
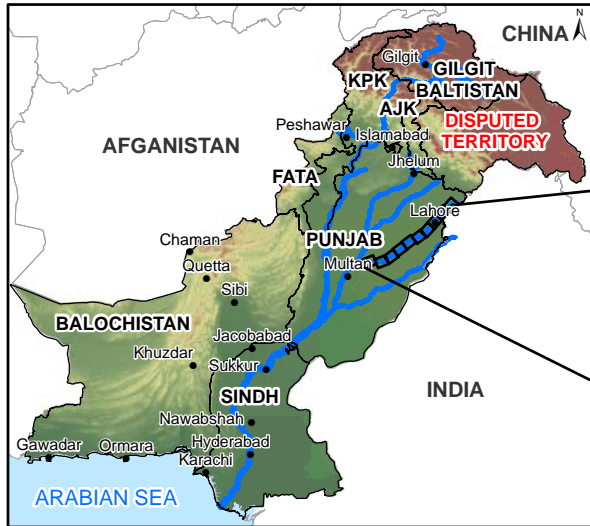
LEGEND

- High Risk Zone (Inundation Extent Corresponding to discharge of 93,000 cusecs below Sidhnai)
- Medium Risk Zone (Inundation Extent Corresponding to discharge of 159,000 cusecs below Sidhnai)
- Low Risk Zone (Inundation Extent Corresponding to discharge of 228,000 cusecs below Sidhnai)

Note: All flood extents are based on breachless conditions



Structure No.	Existing Flood Protection Structure	Inventory Code
138	Left Marginal Bund	P831
139	J-Head Spur RD:38000 Left Marginal Bund	P838
140	X-Spur on Left Marginal Bund RD:31000	P837
141	J-Head Spur RD:20800 Left Marginal Bund	P839
142	Breaching Section of Sidhnai Barrage	P847
143	X-Spur on Left Marginal Bund RD:16900	P836
144	Mole Head Spur RD:15000 Left Marginal Bund	P841
145	Solid Stone Spur #1 along Left Marginal Bund	P843
	Solid Stone Spur #2 along Left Marginal Bund	P844
	Solid Stone Spur #3 along Left Marginal Bund	P845
	Solid Stone Spur #4 along Left Marginal Bund	P846
146	D/S Left Protection Bund	P834
147	D/S Right Protection Bund	P835



DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

LANDUSE MAP RAVI RIVER

Client :
FEDERAL FLOOD COMMISSION
Ministry of Water & Power

Consultants:
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1-C, Block-N, Model Town Extension,
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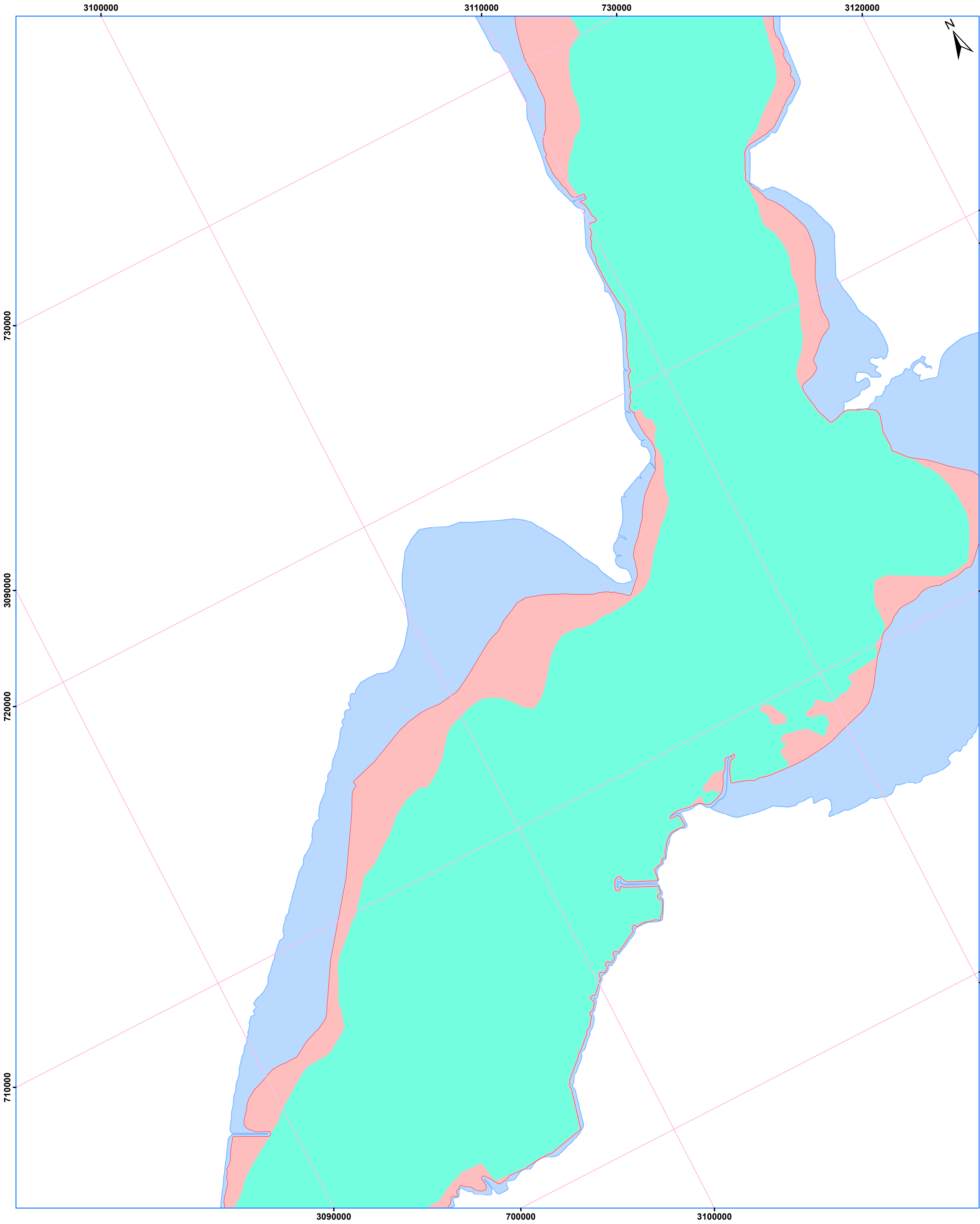
in association with
DELTAES, THE NETHERLANDS

Rev.	Date:	Description	Ckd.	Ver.

Source of Information:
1. Topographic sheets of Survey of Pakistan
2. Freely available satellite imagery
3. FPSP-II GIS data
4. Shuttle Radar Topographic Mission Data (Resolution:90 m)
5. Survey data of Flood protection embankments and structures

Coordinate System
PROJECTION: Lambert Conformal Conic (LMPAK-I) ,
DATUM: WGS84
Grid Reference is in meters

Date: June 30, 2015 By Faraz Aslam

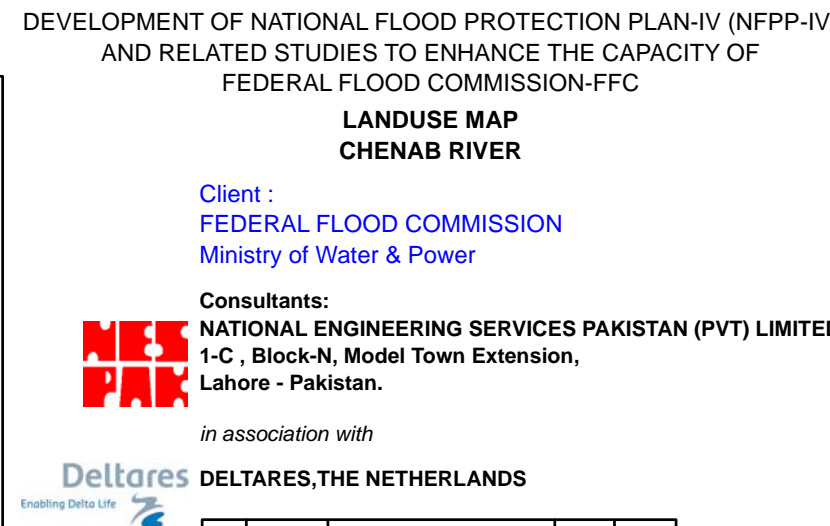
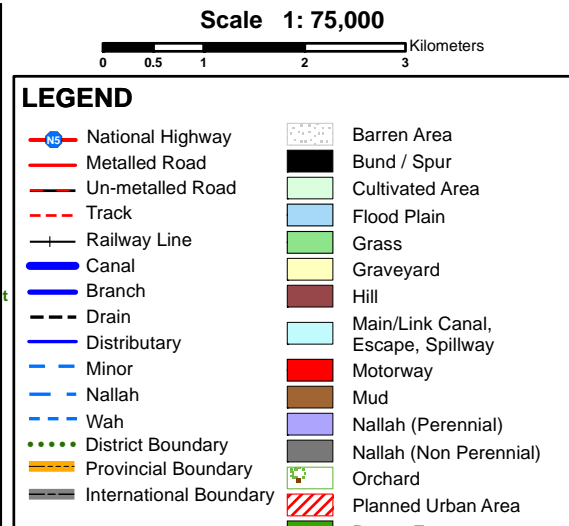
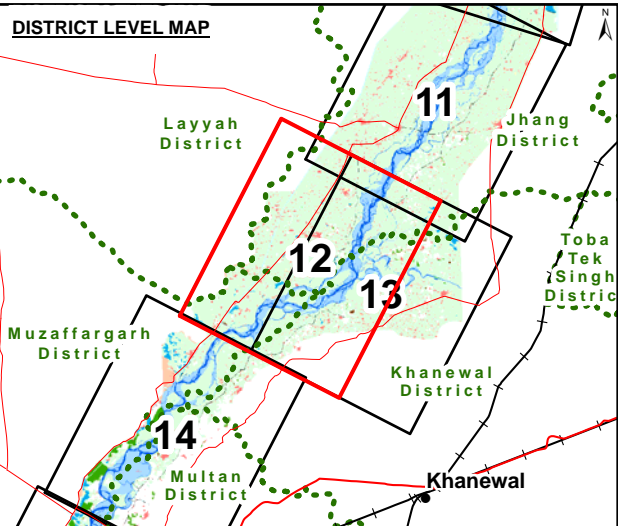
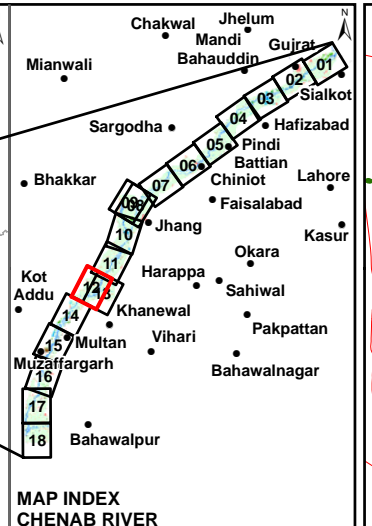
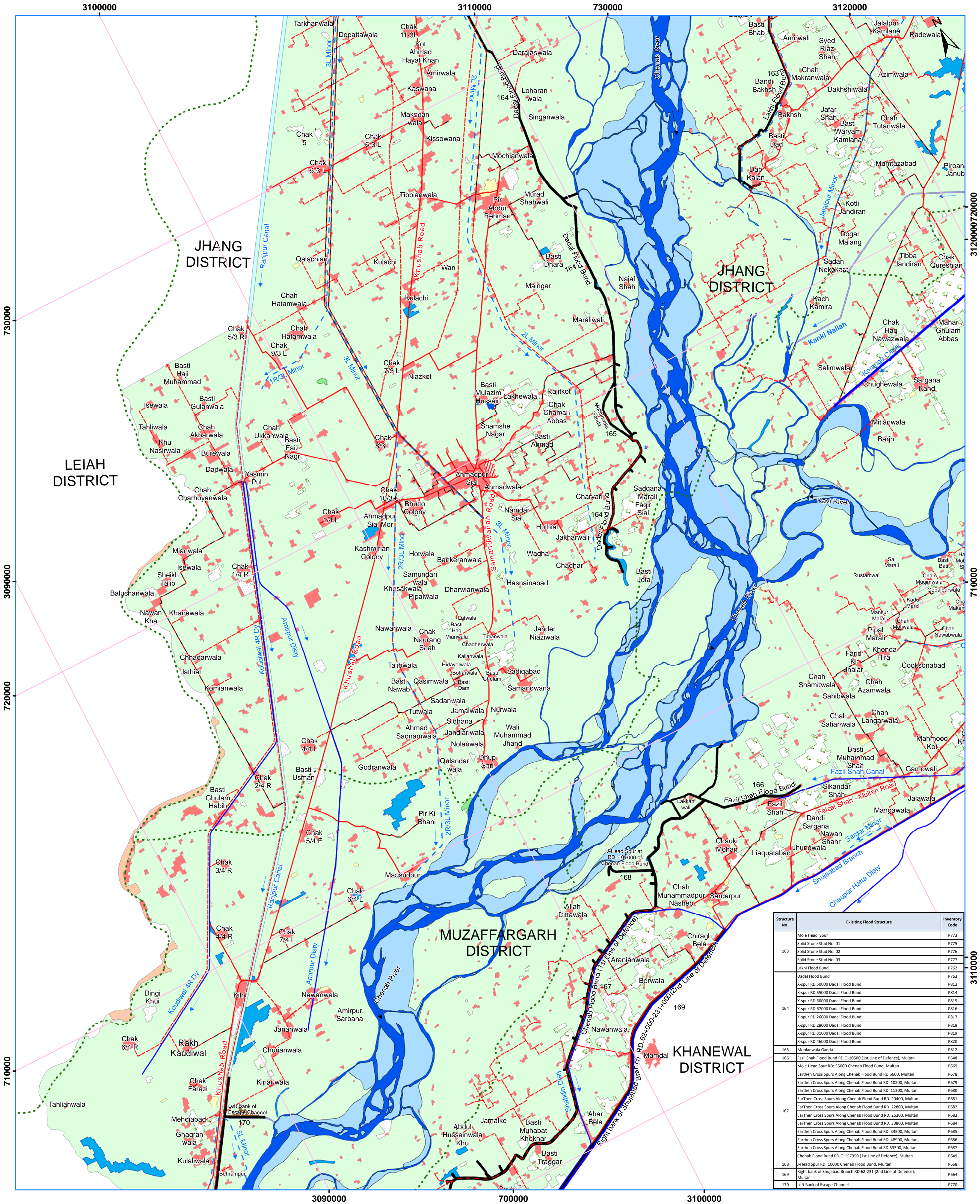


Scale 1:75,000
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LEGEND

- High Risk Zone (Inundation Extent Corresponding to discharge of 423,000 cusecs below Trimmu)
- Medium Risk Zone (Inundation Extent Corresponding to discharge of 616,000 cusecs below Trimmu)
- Low Risk Zone (Inundation Extent Corresponding to discharge of 818,000 cusecs below Trimmu)

Note: All flood extents are based on breachless conditions

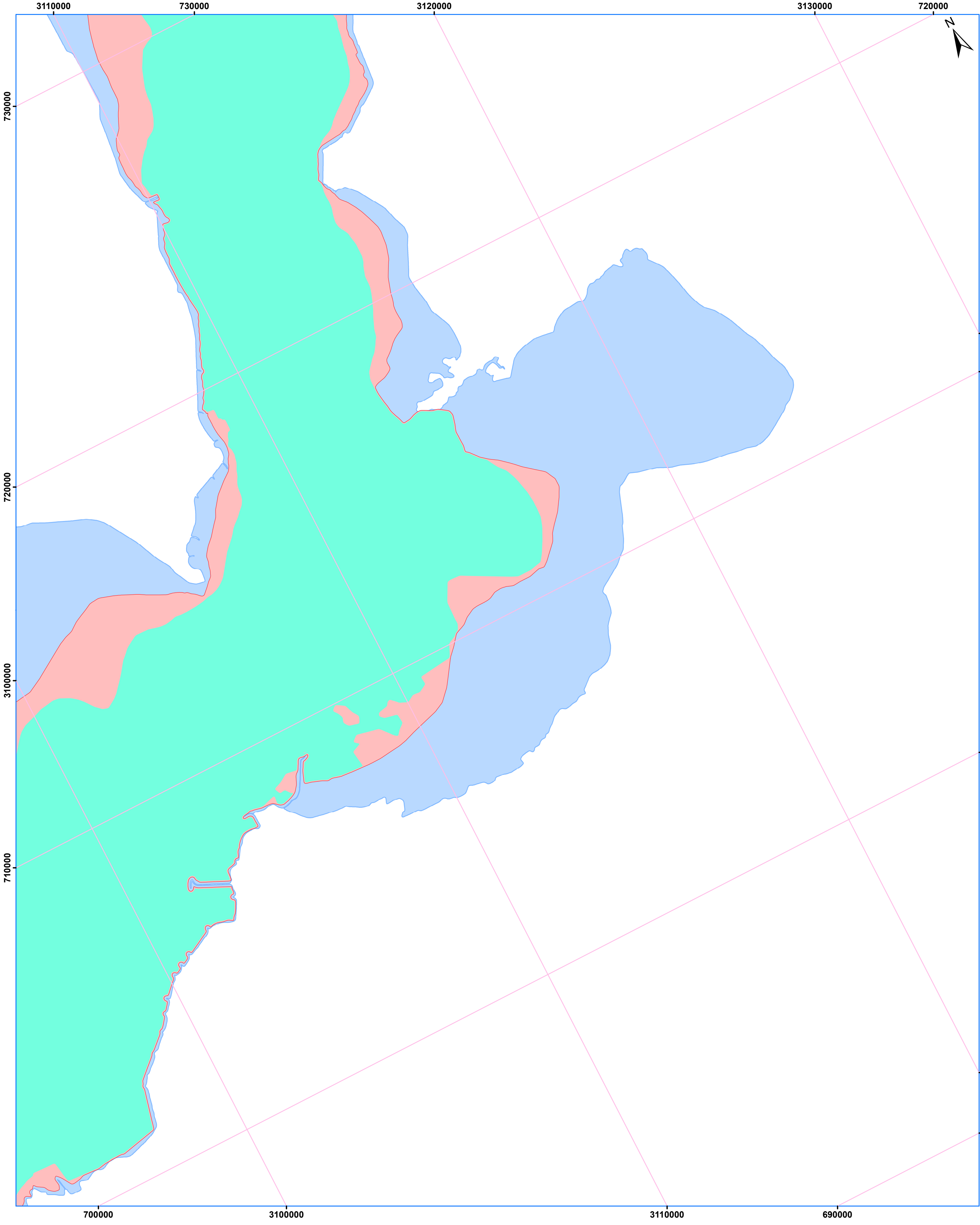


Source of Information:
1. Topographic sheets of Survey of Pakistan
2. Freely available satellite imagery (date: From Feb 5 2007 To April 10 2013)
3. FPSP-II GIS data
4. Shuttle Radar Topographic Mission Data (Resolution:90 m)
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Date: June 30, 2015 By M.Waseem Saeed

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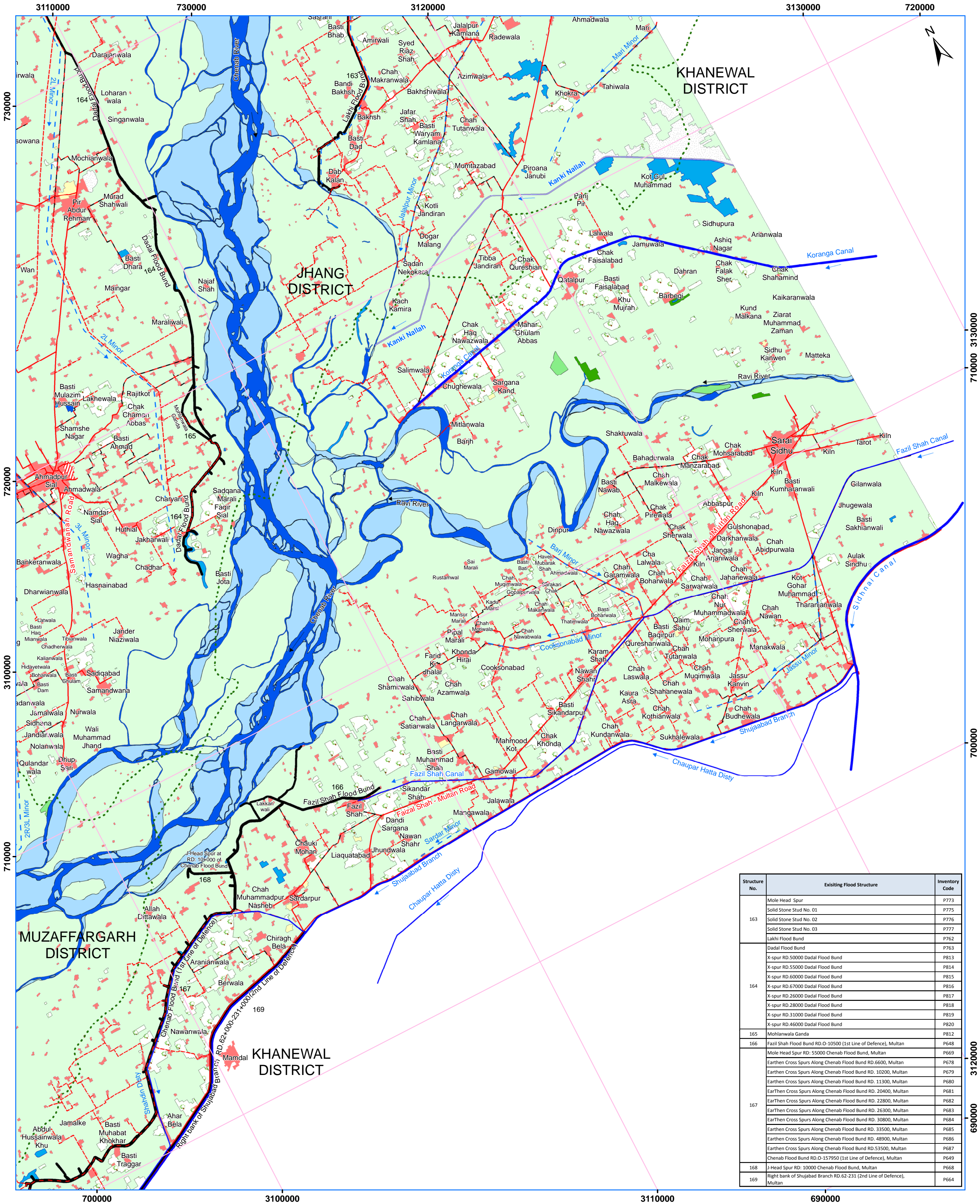


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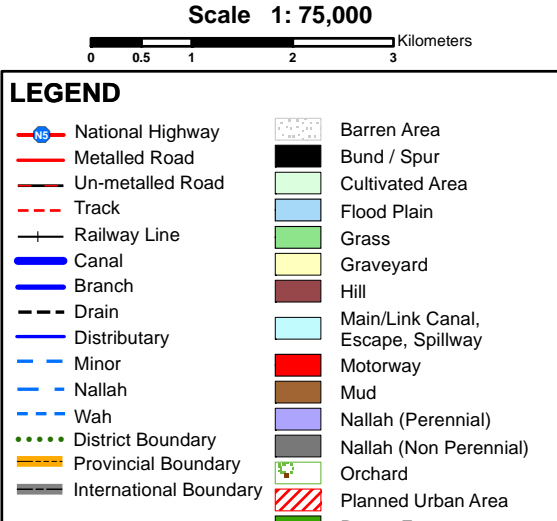
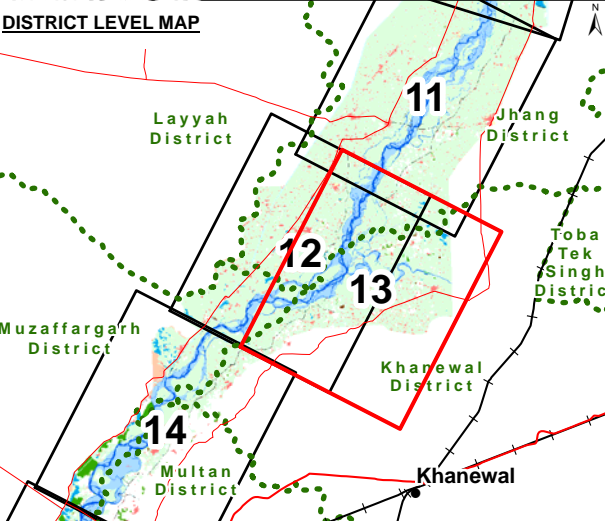
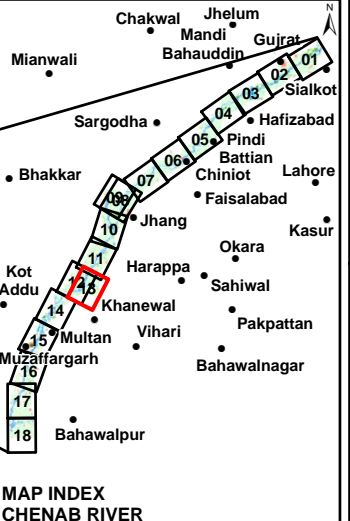
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Note: All flood extents are based on breachless conditions



Structure No.	Existing Flood Structure	Inventory Code
163	Mole Head Spur	P773
	Solid Stone Stud No. 01	P775
	Solid Stone Stud No. 02	P776
	Solid Stone Stud No. 03	P777
	Lakhi Flood Bund	P762
164	Dadal Flood Bund	P763
	X-spur RD.50000 Dadal Flood Bund	P813
	X-spur RD.55000 Dadal Flood Bund	P814
	X-spur RD.60000 Dadal Flood Bund	P815
	X-spur RD.67000 Dadal Flood Bund	P816
	X-spur RD.26000 Dadal Flood Bund	P817
	X-spur RD.28000 Dadal Flood Bund	P818
	X-spur RD.31000 Dadal Flood Bund	P819
	X-spur RD.46000 Dadal Flood Bund	P820
	Mohlanwala Ganda	P812
165	Fazil Shah Flood Bund RD.O-10500 (1st Line of Defence), Multan	P648
167	Mole Head Spur: 55000 Chenab Flood Bund, Multan	P669
	Earthen Cross Spurs Along Chenab Flood Bund RD.6600, Multan	P678
	Earthen Cross Spurs Along Chenab Flood Bund RD.10200, Multan	P679
	Earthen Cross Spurs Along Chenab Flood Bund RD.11300, Multan	P680
	Earthen Cross Spurs Along Chenab Flood Bund RD.20400, Multan	P681
	Earthen Cross Spurs Along Chenab Flood Bund RD.22800, Multan	P682
	Earthen Cross Spurs Along Chenab Flood Bund RD.26300, Multan	P683
	Earthen Cross Spurs Along Chenab Flood Bund RD.30800, Multan	P684
	Earthen Cross Spurs Along Chenab Flood Bund RD.33500, Multan	P685
	Earthen Cross Spurs Along Chenab Flood Bund RD.48900, Multan	P686
	Earthen Cross Spurs Along Chenab Flood Bund RD.53500, Multan	P687
	Chenab Flood Bund RD.O-157950 (1st Line of Defence), Multan	P649
	J-head Spur RD: 10000 Chenab Flood Bund, Multan	P668
	Right bank of Shujabad Branch RD.62-231 (2nd Line of Defence), Multan	P664
169	Multan	P664



DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

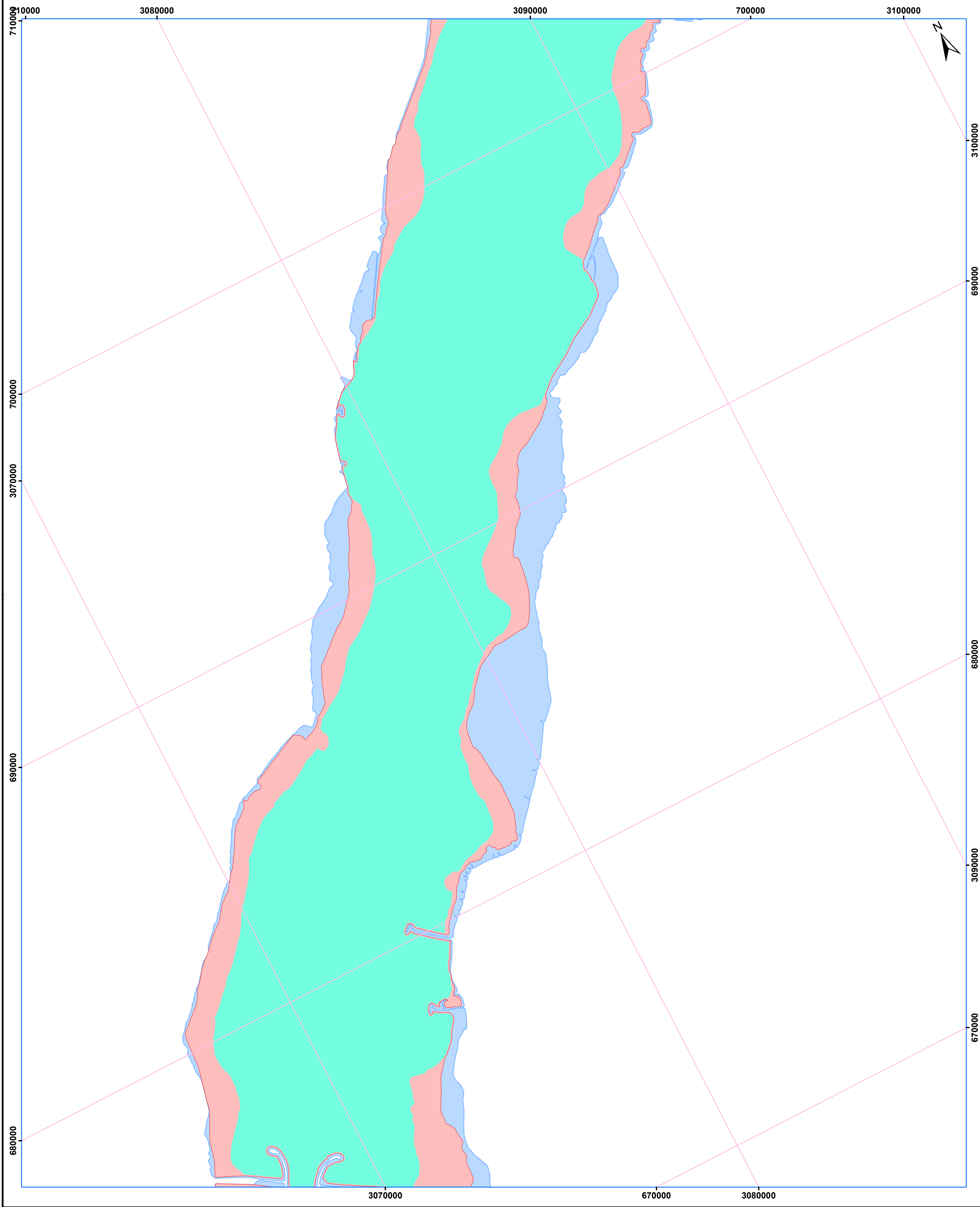
LANDUSE MAP CHENAB RIVER

Client : **FEDERAL FLOOD COMMISSION**
Ministry of Water & Power

Consultants: **NATIONAL ENGINEERING SERVICES PAKISTAN (PVT) LIMITED**
1-C, Block-N, Model Town Extension, Lahore - Pakistan.

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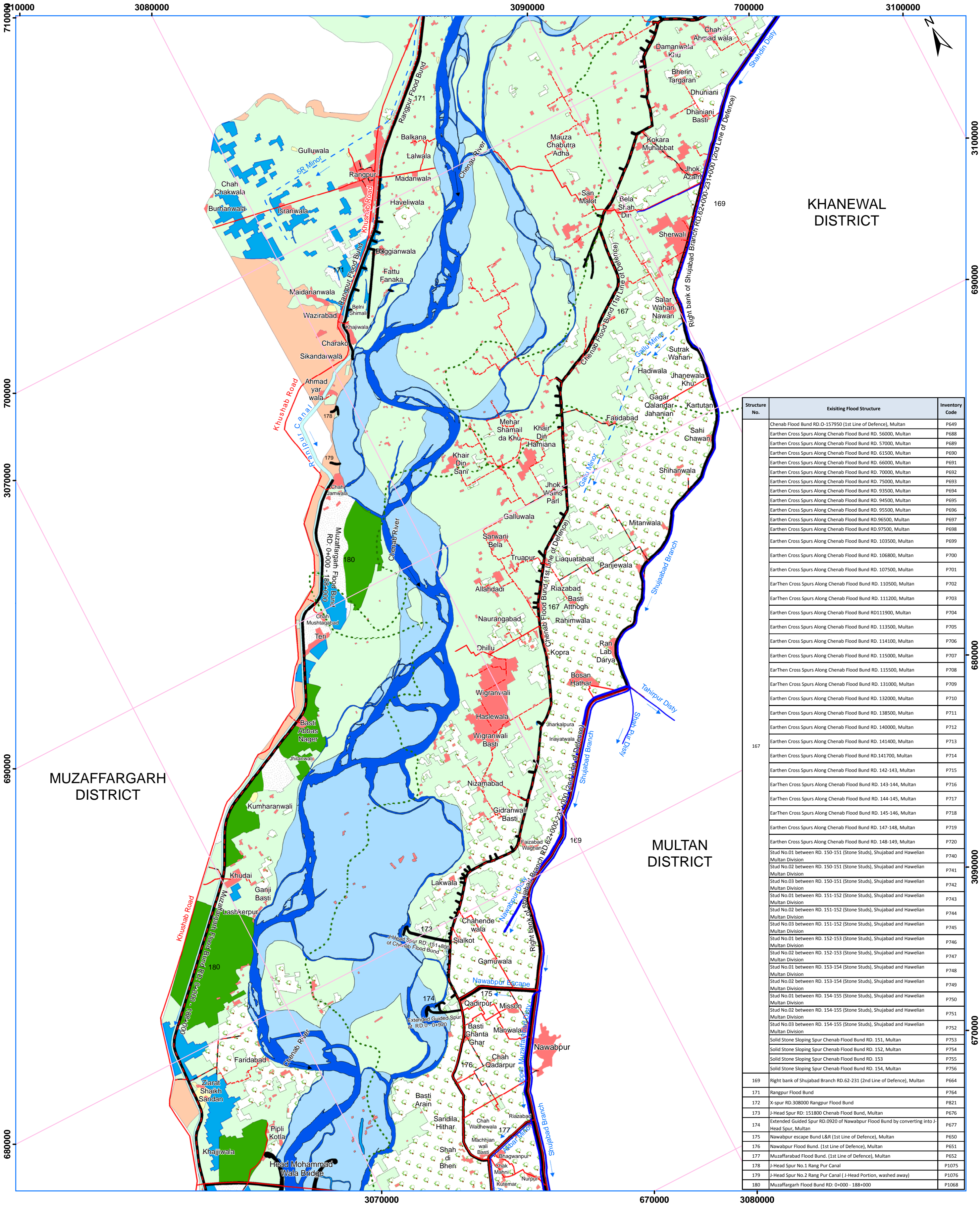


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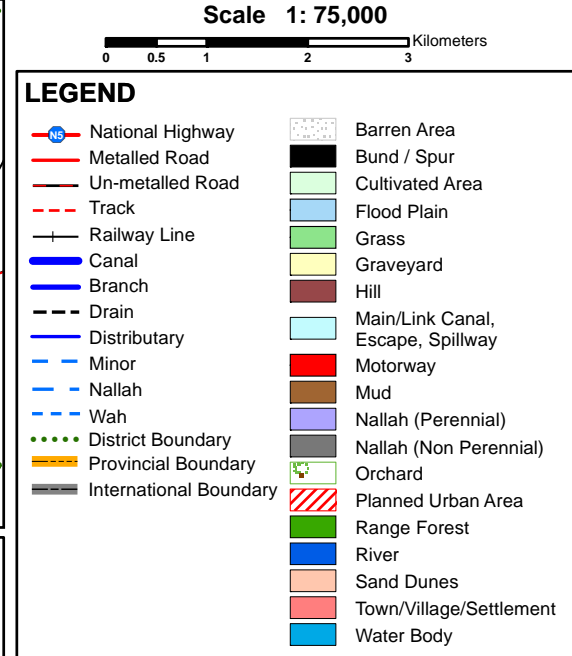
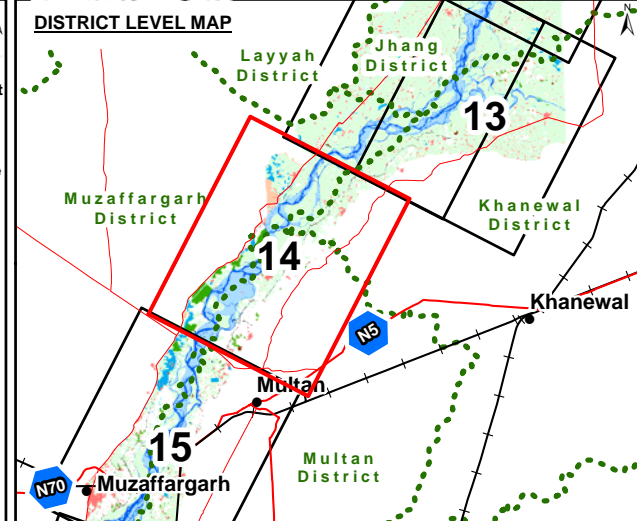
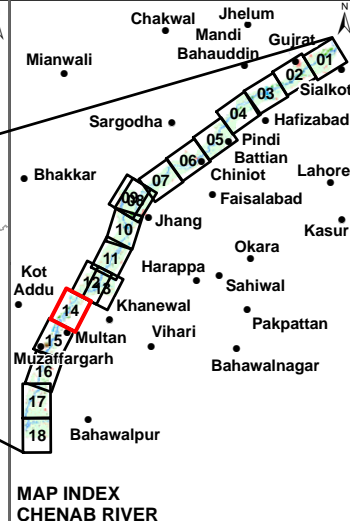
LEGEND

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- Medium Risk Zone (Inundation Extent Corresponding to discharge of 616,000 cusecs below Trimmu)
- Low Risk Zone (Inundation Extent Corresponding to discharge of 818,000 cusecs below Trimmu)

Note: All flood extents are based on breachless conditions



Structure No.	Existing Flood Structure	Inventory Code
	Chenab Flood Bund RD.0-157950 (1st Line of Defence), Multan	P649
	Earthen Cross Spurs Along Chenab Flood Bund RD. 56000, Multan	P688
	Earthen Cross Spurs Along Chenab Flood Bund RD. 57000, Multan	P689
	Earthen Cross Spurs Along Chenab Flood Bund RD. 61500, Multan	P690
	Earthen Cross Spurs Along Chenab Flood Bund RD. 66000, Multan	P691
	Earthen Cross Spurs Along Chenab Flood Bund RD. 70000, Multan	P692
	Earthen Cross Spurs Along Chenab Flood Bund RD. 75000, Multan	P693
	Earthen Cross Spurs Along Chenab Flood Bund RD. 93500, Multan	P694
	Earthen Cross Spurs Along Chenab Flood Bund RD. 94500, Multan	P695
	Earthen Cross Spurs Along Chenab Flood Bund RD. 95500, Multan	P696
	Earthen Cross Spurs Along Chenab Flood Bund RD.96500, Multan	P697
	Earthen Cross Spurs Along Chenab Flood Bund RD.97500, Multan	P698
	Earthen Cross Spurs Along Chenab Flood Bund RD. 103500, Multan	P699
	Earthen Cross Spurs Along Chenab Flood Bund RD. 106800, Multan	P700
	Earthen Cross Spurs Along Chenab Flood Bund RD. 107500, Multan	P701
	Earthen Cross Spurs Along Chenab Flood Bund RD. 110500, Multan	P702
	Earthen Cross Spurs Along Chenab Flood Bund RD. 111200, Multan	P703
	Earthen Cross Spurs Along Chenab Flood Bund RD.111900, Multan	P704
	Earthen Cross Spurs Along Chenab Flood Bund RD. 113500, Multan	P705
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	Earthen Cross Spurs Along Chenab Flood Bund RD. 131000, Multan	P709
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	Earthen Cross Spurs Along Chenab Flood Bund RD. 140000, Multan	P712
167	Earthen Cross Spurs Along Chenab Flood Bund RD. 141400, Multan	P713
	Earthen Cross Spurs Along Chenab Flood Bund RD.141700, Multan	P714
	Earthen Cross Spurs Along Chenab Flood Bund RD. 142-143, Multan	P715
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	Earthen Cross Spurs Along Chenab Flood Bund RD. 144-145, Multan	P717
	Earthen Cross Spurs Along Chenab Flood Bund RD. 145-146, Multan	P718
	Earthen Cross Spurs Along Chenab Flood Bund RD. 147-148, Multan	P719
	Earthen Cross Spurs Along Chenab Flood Bund RD. 148-149, Multan	P720
	Stud No.01 between RD. 150-151 (Stone Studs), Shujabad and Hawelian Multan Division	P740
	Stud No.02 between RD. 150-151 (Stone Studs), Shujabad and Hawelian Multan Division	P741
	Stud No.03 between RD. 150-151 (Stone Studs), Shujabad and Hawelian Multan Division	P742
	Stud No.01 between RD. 151-152 (Stone Studs), Shujabad and Hawelian Multan Division	P743
	Stud No.02 between RD. 151-152 (Stone Studs), Shujabad and Hawelian Multan Division	P744
	Stud No.03 between RD. 151-152 (Stone Studs), Shujabad and Hawelian Multan Division	P745
	Stud No.01 between RD. 152-153 (Stone Studs), Shujabad and Hawelian Multan Division	P746
	Stud No.02 between RD. 152-153 (Stone Studs), Shujabad and Hawelian Multan Division	P747
	Stud No.01 between RD. 153-154 (Stone Studs), Shujabad and Hawelian Multan Division	P748
	Stud No.02 between RD. 153-154 (Stone Studs), Shujabad and Hawelian Multan Division	P749
	Stud No.01 between RD. 154-155 (Stone Studs), Shujabad and Hawelian Multan Division	P750
	Stud No.02 between RD. 154-155 (Stone Studs), Shujabad and Hawelian Multan Division	P751
	Stud No.03 between RD. 154-155 (Stone Studs), Shujabad and Hawelian Multan Division	P752
	Solid Stone Sloping Spur Chenab Flood Bund RD. 151, Multan	P753
	Solid Stone Sloping Spur Chenab Flood Bund RD. 152, Multan	P754
	Solid Stone Sloping Spur Chenab Flood Bund RD. 153	P755
	Solid Stone Sloping Spur Chenab Flood Bund RD. 154, Multan	P756
169	Right bank of Shujabad Branch RD.62-231 (2nd Line of Defence), Multan	P664
171	Rangpur Flood Bund	P764
172	X-spur RD.308000 Rangpur Flood Bund	P821
173	J-Head Spur RD: 151800 Chenab Flood Bund, Multan	P676
174	Extended Guided Spur RD.0920 of Nawabpur Flood Bund by converting into J-Head Spur, Multan	P677
175	Nawabpur escape Bund L&R (1st Line of Defence), Multan	P650
176	Nawabpur Flood Bund. (1st Line of Defence), Multan	P651
177	Muzaffarabad Flood Bund. (1st Line of Defence), Multan	P652
178	J-Head Spur No.1 Rang Pur Canal	P1075
179	J-Head Spur No.2 Rang Pur Canal (J-Head Portion, washed away)	P1076
180	Muzaffargarh Flood Bund RD: 0+000 - 188+000	P1068



DEVELOPMENT OF NATIONAL FLOOD PROTECTION PLAN-IV (NFPP-IV) AND RELATED STUDIES TO ENHANCE THE CAPACITY OF FEDERAL FLOOD COMMISSION-FFC

LANDUSE MAP CHENAB RIVER

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3. FPSP-II GIS data
4. Shuttle Radar Topographic Mission Data (Resolution:90 m)
5. Survey data of Flood protection embankments and structures

Coordinate System
PROJECTION: Lambert Conformal Conic (LMPAK-I),
DATUM: WGS84
Grid Reference is in meters

Date: June 30, 2015 By M.Waseem Saeed

Rev.	Date:	Description	Ckd.	Ver.

Inundation Depth of Settlements in District Khanewal

Ravi River - Sheet No. 9

Sr. No.	Settlement Name	Zone*	District	Inundation Depth at Discharge of 127,000 Cusec below Balloki		Inundation Depth at Discharge of 212,000 Cusec below Balloki		Inundation Depth at Discharge of 300,000 Cusec below Balloki	
				Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)
1	3 Settlements nearby Basti Lal Kathia	H,M,L	KHANEWAL	0.00	1.48	1.30	3.18	1.47	3.58
2	4 Settlements nearby Mauza Babban	H,M,L	KHANEWAL	0.00	1.05	0.10	2.05	0.25	2.09
3	Ajib Kathai Di and nearby 2 Settlements	H,M,L	KHANEWAL	0.81	1.33	2.34	3.90	2.90	2.95
4	Basti Bhusi Kathia and nearby 3 Settlements	H,M,L	KHANEWAL	0.57	1.25	2.40	3.45	2.66	3.53
5	Basti Budhan and nearby 3 Settlements	H,M,L	KHANEWAL	0.00	0.98	0.69	2.04	0.74	2.19
6	Basti Hasteki Dahar and nearby 2 Settlements	H,M,L	KHANEWAL	0.79	1.13	2.61	2.98	2.89	2.99
7	Basti Pipalwali and nearby 3 Settlements	H,M,L	KHANEWAL	0.00	0.29	0.00	1.44	0.00	1.55
8	Dalan Jangal and nearby 5 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	1.65	1.95
9	Kotla Jindra Ram	L	KHANEWAL	0.00	0.00	0.00	0.00	0.25	1.65

Ravi River - Sheet No. 10

Sr. No.	Settlement Name	Zone*	District	Inundation Depth at Discharge of 93,000 Cusec below Sidhnai		Inundation Depth at Discharge of 159,000 Cusec below Sidhnai		Inundation Depth at Discharge of 228,000 Cusec below Sidhnai	
				Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)
1	1 Settlement nearby Basti Hamid Khan	H,M,L	KHANEWAL	0.00	0.10	0.00	0.77	0.00	0.85
2	4 Settlements nearby Ghazi Pandah	H,M,L	KHANEWAL	0.00	0.15	0.00	0.16	0.00	0.19
3	Basti Wariam and nearby 1 Settlement	H,M,L	KHANEWAL	0.00	0.01	0.00	1.30	0.00	1.45
4	Kaborwali Jhalar and nearby 2 Settlements	H,M,L	KHANEWAL	0.92	1.82	2.74	3.80	2.93	3.81
5	Lachman Chotra	H,M,L	KHANEWAL	0.00	0.71	0.00	1.83	0.00	1.93
6	Magha	H,M,L	KHANEWAL	1.56	1.81	2.85	3.10	2.95	3.80
7	Sihuanwala Khuj	H,M,L	KHANEWAL	0.00	1.00	1.69	1.88	1.76	1.99
8	Sardare di Bhaini	H,M,L	KHANEWAL	0.00	0.05	2.73	3.12	2.92	3.91
9	Basti Faval Khakh and nearby 3 Settlements	M,L	KHANEWAL	0.00	0.00	2.52	3.73	2.62	3.78
10	Basti Gosaianwali and nearby 3 Settlements	M,L	KHANEWAL	0.00	0.00	0.00	3.47	0.00	3.64
11	1 Settlement nearby Tibba Sandhiala	L	KHANEWAL	0.00	0.00	0.00	0.00	0.24	1.70
12	Basti Hatamwali	L	KHANEWAL	0.00	0.00	0.00	0.00	0.32	1.96
13	Hussainabad and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.00	1.94
14	Okhauwala Khu and nearby 1 Settlement	L	KHANEWAL	0.00	0.00	0.00	0.00	0.28	1.72
15	Panjiana and nearby 1 Settlement	L	KHANEWAL	0.00	0.00	0.00	0.00	0.93	1.69
16	Rutla and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.72	1.86

Zone*

H= High Risk Inundation Zone corresponds to 5 yr return period flood

M=Medium Risk Inundation Zone corresponds to 15 yr return period flood

L= Low Risk Inundation Zone corresponds to 50 yr return period flood

Inundation Depth of Settlements in District Khanewal

Chenab River - Sheet No. 12

Sr. No.	Settlement Name	Zone*	District	Inundation Depth at Discharge of 423,000 Cusec below Trimmu		Inundation Depth at Discharge of 616,000 Cusec below Trimmu		Inundation Depth at Discharge of 818,000 Cusec below Trimmu	
				Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)
1	10 Settlements nearby Abdul Hussainwala Khu	H,M,L	KHANEWAL	1.35	2.82	1.90	3.37	2.45	3.92

Chenab River - Sheet No. 13

Sr. No.	Settlement Name	Zone*	District	Inundation Depth at Discharge of 423,000 Cusec below Trimmu		Inundation Depth at Discharge of 616,000 Cusec below Trimmu		Inundation Depth at Discharge of 818,000 Cusec below Trimmu	
				Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)
1	17 Settlements nearby Aranianwala	H,M,L	KHANEWAL	0.94	2.07	1.49	2.63	2.05	3.18
2	4 Settlements nearby Lakkanwali	H,M,L	KHANEWAL	0.25	2.13	0.84	2.72	1.24	3.13
3	9 Settlements nearby Fazil Shah	H,M,L	KHANEWAL	0.24	2.15	0.72	2.75	1.58	3.22
4	Allah Dittawala and nearby 34 Settlements	H,M,L	KHANEWAL	0.18	3.10	0.70	3.55	1.84	4.13
5	Barjh and nearby 14 Settlements	H,M,L	KHANEWAL	0.26	2.27	1.40	2.84	1.73	3.17
6	Basti Bati and nearby 1 Settlement	H,M,L	KHANEWAL	0.02	0.10	0.70	1.03	1.84	2.01
7	Basti Jota	H,M,L	KHANEWAL	0.05	0.34	0.39	0.92	0.99	1.25
8	Chah Azamwala and nearby 5 Settlements	H,M,L	KHANEWAL	0.16	2.39	0.53	2.98	0.90	3.36
9	Chah Mugimwala and nearby 2 Settlements	H,M,L	KHANEWAL	0.14	0.43	0.29	0.72	0.85	1.04
10	Chughewala	H,M,L	KHANEWAL	0.06	2.44	0.24	3.03	0.76	3.76
11	Dinpur and nearby 6 Settlements	H,M,L	KHANEWAL	0.42	2.05	0.65	2.62	0.99	2.95
12	Farid Ki Jhalar and nearby 7 Settlements	H,M,L	KHANEWAL	0.07	1.78	0.14	2.36	0.31	2.69
13	Jamalke and nearby 40 Settlements	H,M,L	KHANEWAL	1.52	3.12	2.07	3.67	2.62	4.22
14	Mitlanwala and nearby 9 Settlements	H,M,L	KHANEWAL	1.63	2.05	2.18	2.61	2.53	2.95
15	Rustamwal and nearby 13 Settlements	H,M,L	KHANEWAL	0.85	1.78	1.43	2.37	1.75	2.68
16	Sahibwala and nearby 9 Settlements	H,M,L	KHANEWAL	0.14	1.22	0.73	1.81	1.11	2.19
17	Sai Marali and nearby 2 Settlements	H,M,L	KHANEWAL	0.48	1.12	0.55	1.45	0.80	1.97
18	Salimwala and nearby 18 Settlements	H,M,L	KHANEWAL	0.05	2.72	0.25	3.27	0.34	3.62
19	3 Settlements nearby Basti Muhabat Khokhar	M,L	KHANEWAL	0.00	0.00	2.21	6.21	2.76	6.76
20	Basti Nawab and nearby 5 Settlements	M,L	KHANEWAL	0.00	0.00	0.21	1.27	0.71	1.61
21	Chah Sattanwala and nearby 7 Settlements	M,L	KHANEWAL	0.00	0.00	0.87	1.81	1.26	2.22
22	Chah Shamirwala and nearby 2 Settlements	M,L	KHANEWAL	0.00	0.00	0.87	1.60	1.01	1.96
23	Haveli Mubarak Shah and nearby 3 Settlements	M,L	KHANEWAL	0.00	0.00	0.01	0.55	0.10	1.08
24	Kadu Maral and nearby 5 Settlements	M,L	KHANEWAL	0.00	0.00	0.03	0.66	0.78	1.52
25	Mansur Marali and nearby 5 Settlements	M,L	KHANEWAL	0.00	0.00	0.02	0.25	0.03	1.05
26	Pipal Marali and nearby 5 Settlements	M,L	KHANEWAL	0.00	0.00	0.17	1.64	0.50	1.97
27	3 Settlements nearby Basti Sikandarpur	L	KHANEWAL	0.00	0.00	0.00	0.00	0.28	0.44
28	3 Settlements nearby Mahmood Kot	L	KHANEWAL	0.00	0.00	0.00	0.00	0.44	0.83
29	7 Settlements nearby Gamowali	L	KHANEWAL	0.00	0.00	0.00	0.00	0.93	1.33
30	7 Settlements nearby Nawan Shahr	L	KHANEWAL	0.00	0.00	0.00	0.00	0.22	1.17
31	Ahmadwala and nearby 8 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.73	1.30
32	Bahadurwala and nearby 4 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.05	0.61
33	Barbegi and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.02	0.99
34	Basti Boharwala and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.03	0.07
35	Basti Faisalabad	L	KHANEWAL	0.00	0.00	0.00	0.00	0.29	0.53
36	Basti Muhammad Shah	L	KHANEWAL	0.00	0.00	0.00	0.00	0.65	1.66
37	Chah Langarwala and nearby 7 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.79	1.63
38	Chah Makanwala and nearby 5 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.41	0.66
39	Chah Motiwala and nearby 3 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.01	0.34
40	Chah Nawabwala and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.02	0.07
41	Chah Garamwala and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.06	0.39
42	Chah Haq Nawazwala and nearby 10 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.05	0.93
43	Chak Manzarabad and nearby 3 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.09	0.27
44	Chak Mohsarabad and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.01	0.09
45	Cooksonabad and nearby 10 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.03	0.11
46	Gopalpurwala and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.04	0.34
47	Karam Shah	L	KHANEWAL	0.00	0.00	0.00	0.00	0.05	0.58
48	Khonda Hirai	L	KHANEWAL	0.00	0.00	0.00	0.00	0.64	0.98
49	Khu Mujrah and nearby 11 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.02	1.55
50	Kund Malkana	L	KHANEWAL	0.00	0.00	0.00	0.00	0.06	1.11
51	Sarakani Chak and nearby 3 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.25	0.57
52	Sargana Kand and nearby 4 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.98	1.33
53	Shakruwala and nearby 4 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.04	0.10
54	Sidhu Kanwen and nearby 2 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.03	0.07
55	Sikandar Shah and nearby 5 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.08	1.08
56	Thatimwala and nearby 8 Settlements	L	KHANEWAL	0.00	0.00	0.00	0.00	0.02	0.69

Chenab River - Sheet No. 14

Sr. No.	Settlement Name	Zone*	District	Inundation Depth at Discharge of 423,000 Cusec below Trimmu		Inundation Depth at Discharge of 616,000 Cusec below Trimmu		Inundation Depth at Discharge of 818,000 Cusec below Trimmu	
				Min (m)	Max (m)	Min (m)	Max (m)	Min (m)	Max (m)
1	14 Settlements nearby Sherwali	H,M,L	KHANEWAL	0.03	2.62	0.08	3.09	1.06	6.56
2	23 Settlements nearby Damanwala	H,M,L	KHANEWAL	0.20	2.84	0.28	3.38	0.58	3.92
3	Khair Din Hamiana and nearby 7 Settlements	H,M,L	KHANEWAL	1.00	2.95	1.44	3.37	1.87	3.78
4	Mehar Shamail da Khu and nearby 31 Settlements	H,M,L	KHANEWAL	0.05	3.03	0.12	3.46	0.36	3.89

Zone*

H= High Risk Inundation Zone corresponds to 5 yr return period flood

M=Medium Risk Inundation Zone corresponds to 15 yr return period flood

L= Low Risk Inundation Zone corresponds to 50 yr return period flood