

**ACTION PLAN FOR
RIVER GHAGGAR

DECEMBER 2018**

Government of Haryana



Index

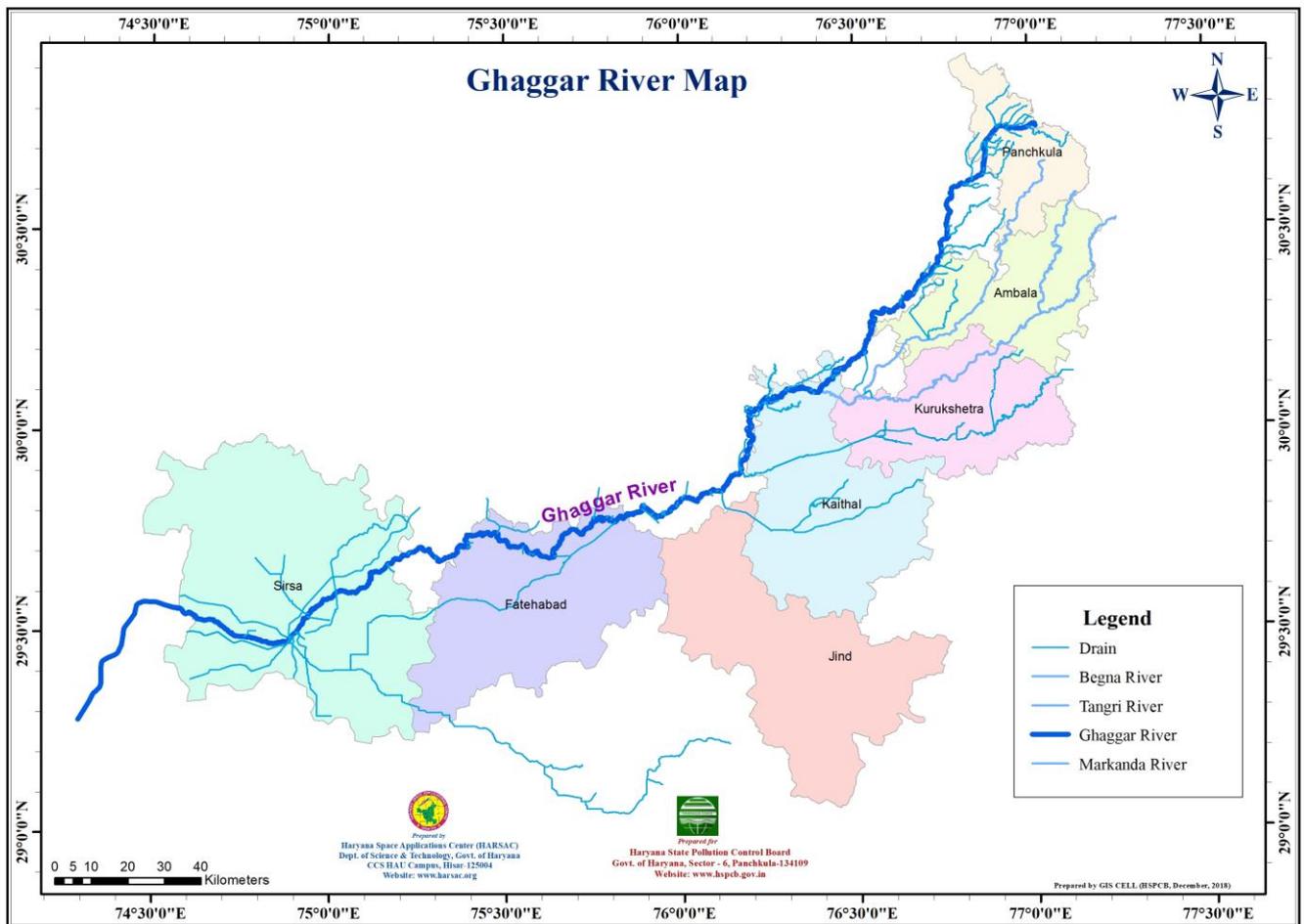
Sr. No.	Topic	Page No.
1.	Introduction	3-4
2.	Measurement of Flow Rate and quality of drains	4-5
3.	Identification of sources of pollution having out fall in drains	6-19
4.	Regular monitoring of industries by SESTF and action against violators.	19
5.	Dredging & de-silting of drains in the cities	19
6.	Providing Sewerage in un-sewered area of unapproved colonies	19-20
7.	Plan for laying of sewerage in approved colonies along river Yamuna	20-23
8.	Action Plan for STPs	23-27
9.	Action Plan for CETPs	27
10.	Online Monitoring Devices	28-30
11.	Plan for Integrated Solid Waste Management (ISWM) of 7 Clusters	30-32
12.	Plan for e-waste management by HSPCB/ULBD.	32
13.	Plan for plastic waste management by HSPCB/ULBD	32
14.	Plan for Bio-Medical Waste Management	32-33
15.	Agriculture Practices	33-38
16.	Storage capacity increase	38-40
17.	Greenery Development Plan in Districts	41-44
18.	Ground Water Management	44-45
19.	Estimation of sewage	45-46
20.	Open defecation in Districts	46-47
21.	Disposal by sewages through tankers by private parties	47
22.	Involvement of Civil Society/awareness	47
23.	Organizing of Health Camps	47
24.	Concluding Remarks	47-48

1. INTRODUCTION

The River Ghaggar

The River Ghaggar originates in Sirmour District of Himachal Pradesh and travels a length of 320 KM through the State of Haryana, Punjab & Rajasthan. It enters the territory of Haryana in Panchkula District near Kalka. It passes through the district Panchkula to Mohali in Punjab. Then again it enters in Ambala and then re-enters into district Patiala in Punjab. IT again enters in Haryana in Kaithal district and then crosses to Sangrur district. It again enters in Fatehabad district and crosses to Mansa district and re-enter in Haryana in Sirsa district and finally enter in Hanuman district of Rajasthan.

Ghaggar River in Haryana



Main Sources of Pollution in River Ghaggar

The River Ghaggar as well as the major drain outfalls into the river are being monitored regularly by the State Pollution Control Boards (SPCB) at different locations. The Biochemical Oxygen Demand (BOD) level does not conform to the prescribed norms in many points and the river shows fluctuations in dissolved oxygen (DO) levels from 'Nil' to 'above saturation' levels, thereby indicating the presence of organic pollution load and prevalence of eutrophic conditions.

Major drains of River Ghaggar in Haryana, their status and action plan for their treatment

There are 7 major drains, i.e., Sukhna Choe, Ghail drain, Markanda River, Saraswati Drain, Kaithal Drain, Ratia Drain and Sirsa Drain falling out in River Ghaggar in the State of Haryana.

OA No. 138 of 2016

Hon'ble NGT has taken up the matter SUO-Moto for prevention of pollution of Ghaggar river.

The State of Haryana was also issued directions alongwith other States vide Order dated 07.08.2018. The State of Haryana has been implementing the directions of the Tribunal by preparing an action plan to control pollution in river Ghaggar, involving the stakeholder Departments. Vide order dated 07.08.2018, the Hon'ble NGT has passed stringent remarks regarding the failure of the administration in handling the situation and the repeated failure in carrying out the binding directions in various orders. Accordingly, the NGT has constituted a Executing Committee comprising of Justice Pritam Pal Former Judge Punjab & Haryana High Court and one Scientist from CPCB and one Scientist from Ministry of Environment and Forest and Climate Change, New Delhi.

The State of Haryana took a series of steps to religiously implement the directions of Hon'ble NGT. Accordingly a series of meetings were held at the level of Chief Secretary of Government of Haryana and other senior officials with the administrative Secretaries and senior officials of various stakeholder Departments including Irrigation, Public Health, Urban Local Bodies, Environment, State Pollution Control Board and Town and Country Planning. Accordingly, the following plan has been finalized at State level, including short and long term actions, with specific time frames, as identified by the agencies concerned.

2. Measurement of Flow Rate and Quality of Drains

The details of flow of water in the **eleven** drains outfalling in river Yamuna and the quality of water, as measured by Irrigation Department and HSPCB are given as below.

Statement of flow and quality of drains outfalling directly/indirectly into river Ghaggar

Sr. No.	Drains meeting with river Ghaggar	Towns	Flow (MLD)				
			July, 2018	Aug, 2018	Sept., 2018	Oct., 2018	Nov., 2018
1	Discharge of STP, Sec-28, Panchkula at Vill- Kakrali, Punjab.	Panchkula, Nada Sahib, Ramgarh	8	9	9.8	8.57	
2	Drain of Panchkula entering to Sukhna Nallah		24	20	22	20.8	
3	Sukhna choe at Vill- Bhankarpur, Punjab	Zirakpur (Pb), Dhakoli (Pb), Chandigarh, Panchkula	49	45	47.5	46.5	
4	Ambala Drain	Ambala				24.46	
5	Ghail drain at Rampur, Ambala	Ambala	24.5	19.6	24.5	23	
6	Markanda River at Vill. Dhandhota	Ambala, Kala Amb (Haryana and Himachal)					
7	Sagar Para Drain at Vill. Sagra	Kurukshetra, Shahabad, Pehowa	257.2	240	257	245	
8	Kaithal drain at Vill. Khanauri	Kaithal, Guhla		156	535	2.1	
9	Discharge of M.C. Ratia (Fatehabad)	Ratia (Fatehabad)					
10	Sukhana Nallah		5	3.9	6.3	4.7	
11	Jattan walla Nallah		17.1	19.6	29.4	21	

3. Identification of sources of pollution having out fall in drains.

Irrigation Department, after a detailed field survey, has identified the pollution sources which are releasing effluent into main drains and the list of such sources has been given in the table below. Irrigation Department has also been directed to make further surveys periodically to identify additional points which will be added to this existing list. The Special Task Force, constituted at District level has been directed to verify these points on ground and to submit a time bound action plan to control the pollution or altogether stop the discharge of the effluent from these points.

Details of Drains/ Sources discharges effluent in the Ghaggar river in the stretch of District Panchkula.

Sr. No.	Name of town/ city	Name of Drain	Sources of untreated/ treated discharge to drains	Actual location of untreated/ treated discharge meeting the drains	Ultimately discharge going to drain reaches to	Approx. quantity of discharges/ day
1	Pinjore	Jhajra Drain	Treated 5 MLD STP	Manakpur Nanakchand	Sukhna Nadi a tributary of river Ghaggar	2.5 MLD
2	Himshikha Colony	Virat NagarDr	Untreated/ waste water of virat Nagar residentail area	Near Issar nagar	Mallah Nadi a tributary of river Ghaggar	0.5 MLD
3	Kalka	Jhajra Drain	treated 4.50 MLD STP	Jhajra Drain (treated)	Sukhna Nadi a tributary of river Ghaggar	1.45 MLD
4	Kalka	Railway Drain	Treated 0.25 MLD STP	Jhajra Drain (treated)	Sukhna Nadi a tributary of river Ghaggar	0.05 MLD
5	Pinjore (Saini Mohalla & Chouna Chowk), Vishva karma Colony, Pinjore, Shive Shakti colony	Nallah Along with rains/ nallah Shiv Shakti Colony	Domestic water of Pinjore Saini Mohalla & Chouna Chowk, Vishva Karma Colony, Shiv Shakti Colony	Old NH-22 OPP., Pinjore garden entry point, near kalka shimla highway	kaushalya river a tributary of river Ghaggar	0.86 MLD

Sr. No.	Name of town/ city	Name of Drain	Sources of untreated/ treated discharge to drains	Actual location of untreated/ treated discharge meeting the drains	Ultimately discharge going to drain reaches to	Approx. quantity of discharges/ day
6	Shive Colony lekhu Colony	Drains/ nallah (Lekhu Colony)	Domestic water of Shiv Colony of Lekhu Colony	Open Nallah Near Forest Complex	Jhajra river a tributary of river Ghaggar	0.48 MLD
7	Dharampur colony Officer colony, Model Town Rathpur Colony Abdulpur Colony Khurana Colony	Nallah near forest drains/ Nallah, open Nallah/ drains/ Nallahg arh Road drains / Nallah	Domestic Water of Dharampur colony a officer colony, domestic wter of model town, domestic water of rathpur colony abdulapur colony Khurana colony	Nallah alongwith Rathpur Colony end point off Nallah NH-21 and Jhajra river side end of Khurana Colony	Jhajra river a tributary of river Ghaggar	1.23 MLD
8	Kalka Town Khatik Mohalla Handiya Mohalla	Open Nallah/ Drains in town khatik Mohalla Handiya Mohalla	Domestic water of Khatic Mohalla/ Handiya Mohalla	Sukhna River side Near Bridge Khatic Mohalla/ Handiya Mohalla	Sukhna Nadi a tributary of river Ghaggar	0.31 MLD
9	Kalka Town Khatik Mohalla Handiya Mohalla	Open Nallah/ Drains in town khatik Mohalla Handiya Mohalla	Domestic water of Khatic Mohalla/ Handiya Mohalla	Sukhna River side Near Bridge Khatic Mohalla/ Handiya Mohalla	Sukhna Nadi a tributary of river Ghaggar	0.31MLD
10	Bheron ki Sher	Open Nallah/ Drains in Bheron ki Sher	Domestic water of Bheron ki sher	Sukhna River side near Rambagh Road (Bridge)	Sukhna Nadi a tributary of river Ghaggar	0.09 MLD

Sr. No.	Name of town/ city	Name of Drain	Sources of untreated/ treated discharge to drains	Actual location of untreated/ treated discharge meeting the drains	Ultimately discharge going to drain reaches to	Approx. quantity of discharges/ day
11	Kamla Nagar/ Khila Colony	Open Nallah in Kamla Nagar & Khilla Colony	Domestic water of Kamla Nagar a Khila Colony	Sukhna river of tributary of Ghaggar River	Sukhna Nadi a tributary of river Ghaggar	0.39 MLD
12	Lower Kurari/ Upper Mohalla	Open Nallah lower kurari Upper Mohalla	Domestic water of lower kurari upper mohalla	Near Railway station opp. Railway Bridge kalka	Jhajjra river a tributary of river Ghaggar	0.48 MLD
13	Valmiki Basti/ Gurbax Colony	Open Nallah Valmiki basti Gurbax colony	Domestic water of Valmiki Basti Gurbax colony	Back side of MC Office Near Ren Basera Kalka	Jhajjra river a tributary of river Ghaggar	0.19 MLD
14	Azad colony bharat nagar Bangala Basti Shakti	open nallah bhart Nagar Bangala basti	Domestic water of Azad Colony Bharat Nagar Bangala Basti, Shakti	Near Railway Washing Center Kalka	Jhajjra river a tributary of river Ghaggar	0.39 MLD
15	Sharma Colony Basant Vihar & Vikas Vihar & Ram Nagar	open Nallah sharma colony Basant Vihar/ Ram Nagar	domestic Water of Sharma Colony Basant Vihar & Vikas Vihar & ram Nagar	Near BDO Office Kalka	Jhajjra river a tributary of river Ghaggar	0.53 MLD
16	Panchkula Town Ramgarh Village	Ramgarh village Drains/ Nallah	Domestic water of Ramgarh village	Sector-23 & 28 Dividing Road to Ghaggar River	Ghaggar River	0.48 MLD
17	Bir Ghaggar	BIR Ghaggar village drains Nallah	Domestic water of village BIR Ghaggar	river Ghaggar	Ghaggar River	0.53 MLD

Sr. No.	Name of town/ city	Name of Drain	Sources of untreated/ treated discharge to drains	Actual location of untreated/ treated discharge meeting the drains	Ultimately discharge going to drain reaches to	Approx. quantity of discharges/ day
18	Chandi Mandir	Chandi Mandir village area drains	Domestic Water of village Chandi Mandir	Abad area of river Ghaggar	Ghaggar River	0.31 MLD
19	Surajpur, BCW, Raipur	Surajpur Village BCW Raipur Area drain	Domestic water of Village Surajpur, BCW & Raipur	Abadi area to river Ghaggar	Ghaggar River	0.34 MLD
20	Ishar Nagr	Ishar Nagar Drain	Flood water/ waste water	Near Mallah Bridge	kaushalya river a tributary of river Ghaggar	51.37 MLD (During Flood season only)
21	Panchkula	Ghaggar River	STP, Sector-28	Bank of Ghaggar River	Ghaggar River	8.0 MLD
22	Chandi Mandir Cantt.	Singh Nallah choe	Flood water/ domestic water of chandi mandir cantt. Area through STP	Near Old Panchkula left side NH-22	Ghaggar River	4893 MLD (during flood season only)
23	Khetpurali	Khetpur ali village Nallah	Public used water	River end of Khetpurali Village	River Tangri a Tributary of Ghaggar	0.06 MLD
24	Raipur Rani	Raipur rani nallah	Public used water	Near Bridge of River Tangri	River Tangri a Tributary of Ghaggar	0.14 MLD
25	Alipur Barwala	HSI IDC Drain	used water of HSI IDC through STP	HSI IDC alipur Barwala	River Tangri a Tributary of Ghaggar	0.4 MLD
26	Panchkula	Manima jra, Choe	untreated Sector-4, 6 MDC, Panchkula	Sector-5, MDC Bridge	Ghaggar River	0.25 MLD
27	Panchkula	Manima jra, Choe	Treated Swastik Vihar, Sec-5, MDC Panchkula	Swastic Vihar, Sector-5, MDC, Panchkula	Ghaggar River	0.17 MLD

Sr. No.	Name of town/ city	Name of Drain	Sources of untreated/ treated discharge to drains	Actual location of untreated/ treated discharge meeting the drains	Ultimately discharge going to drain reaches to	Approx. quantity of discharges/ day
28	Panchkula	Manimajra, Choe	untreated Sector-4, 6 MDC, Panchkula	GH-1, Sector-5, MDC, Panchkula	Ghaggar River	0.12 MLD
29	Panchkula	Manimajra, Choe		Bridge Sector-7 & 18, Dividing Road Sector-7, Panchkula	Ghaggar River	0.25 MLD
30	Panchkula	rajiv-Indira colony rainy Nallah	SWD NAC Manimajra	Bridge 17/18	Ghaggar River	0.30 MLD
31	Panchkula	rajiv-Indira colony rainy Nallah	Sector-17, Panchkula	Sector-17	Ghaggar River	0.4 MLD
32	Panchkula	rajiv-Indira colony rainy Nallah	Domestic water of Rajiv Colony	Sector-17	Ghaggar River	0.4 MLD
33	Panchkula	rajiv-Indira colony rainy Nallah	Domestic water of Rajiv Colony	Rajiv Indira Colony	Ghaggar River	0.4 MLD
34	Panchkula	rajiv-Indira colony rainy Nallah	Domestic water of Rajiv Colony	Sector-17, Near # 1023	Ghaggar River	0.25 MLD
35	Panchkula	rajiv-Indira colony rainy Nallah	Bhudhanpur Village	Opp. New Guga Mari	Ghaggar River	1.00 MLD

Sr. No.	Name of town/ city	Name of Drain	Sources of untreated/ treated discharge to drains	Actual location of untreated/ treated discharge meeting the drains	Ultimately discharge going to drain reaches to	Approx. quantity of discharges/ day
36	Panchkula	Singh Nallah choe	Sewer Waster of Sector-4, Panchkula	4/12 Bridge near H. No. 869 sector-12	Ghaggar River	280 MLD
37	Panchkula	Singh Nallah choe	Sewer Waster of Sector-12A, Panchkula	near Harihar Mandir Central Bridge 12 A	Ghaggar River	1.00 MLD
38	Panchkula	Singh Nallah choe	STP, Sector-20	NH-22	Ghaggar River	30.00 MLD

Kaithal

Sr. No.	Name of Drains	Discharge (CS)	Location of Outfall RD. & Village	Starting point of drain
1	KAITHAL DRAN FROM RD. 18000-163000	2044.00	IN GHAGGAR RIVER NEAR KHANOURI	KEORAK
2	MEERAPUR CHOE DR. FROM RD. 0-8600	830.00	GHAGGAR RIVER NEAR VILL THATIANA	PUNAJB STATE
3	OLD GHAGGAR FROM RD. 0-56730	50.00	GHAGGAR RIVER NEAR VILL BHATIAN	CO CHEEKA PATIALA ROAD NEAR CHEEKA TOWN
4	PARA RIVER		GANGGAR RIVER	
5	MANAS L/DR. FROM RD. 0-19500	48.00	AT RD. AT RD. 111900/L KTL. DR. NEAR VILL. SILA KHERA	MANAS
6	SILA KHERA L/DR. FROM RD. 0-9700	30.00	AT RD. 102000/L KTL DR. NEAR VILL. SILA KHERA	POND OF NEAR CHANDANA GATE KTL
7	MAGHO MAJRI L/DR. FROM RD. 0-24100	50.00	AR RD. 111900/R KTL DR. NEAR PATTI KHOT	KHANPUR
8	GEONG DR. FROM RD. 0-17300	141.00	AR RD. 111900/R AMIN DR. NEAR KAITHAL	GEONG

Sr. No.	Name of Drains	Discharge (CS)	Location of Outfall RD. & Village	Starting point of drain
9	DEVIGARH L/DR. FROM RD. 0-12000	55.00	AR RD. 37700/R AMIN DR. NEAR KHITHAL	DEVIGARH
10	SARASVATI DR. FROM RD. 0-101000 (NOW UNDER IN XEN/SARASVATI HERITAGE DIVISION NO.3 KTL)	16000.00	PARA RIVER NEAR VILLAGE CHAKU LADANA	BIBIPUR LAKE
11	PAPSAR L/DR. FROM RD. 0.21300	87.00	AT RD. 31400/R SARASVATI DR. NEAR VILL. POLAR	PAPSAR
12	KAKRALA INAIT L/FR. FROM RD. 0-16900	48.50	AR RD. 9000/L PAPSAR L/DR. NEAR VILL. KHNGTHALI	KAKRALA
13	PUNDRI L/DR. 0-22743	37.50	AR RD. 58600 AMIN DR. NEAR VILL. PILINI	KAKOT
14	PUNDRI DR. NO.1 0-99590	285.00	AT RD. 22743 PUNDRI L/DR. NEAR VILL. SAPAN KHERI	NIGDHU
15	PUNDRI DR. 0-140000	1410.00	AR RD. 82000 KAITHAL DR. NEAR VILL. DIWAL	RAISAN
16	KAUL L/DR. 0-6250	11.40	AT RD. 118500 AMIN DR. NEAR VILL. KAUL	KAUL
17	KAUL L/DR. (PUCCA ECTION) 0-2100	11.25	AR RD. 118500 AMIN DR. NEAR VILL. KAUL	KAUL
18	KAUL L/DR. (PUCCA ECTION) 0-1800	11.40	AR RD. 118500 AMIN DR. NEAR VILL. KAUL	KAUL
19	OLD MANAS L/DR. FROM RD. 0-18500	50.00	AT RD. 98000/R KAITHAIL DR. NEAR VILL. KUTABPUR	FROM VILL. POND OF MANAS
	Total	18276.05		

Kaithal

Sr. No.	NAME OF DRAIN ETC. WITH LENGTH	DISCHARGE (IN CS.)	ORIGINATING FROM	POINT NO.	OUT FALLING AT	SHORT NOTE/REMARKS	S.T.P .
1	PAPSAR LINK DRAIN FROM RD 0 TO 21300	0.94 CS. 0.87 CS. 1.58 CS.	PAPER BOARD MILL VILLAGE KANGTHALI-DO-VILLAGE KANTHALI VILLAGE KANGRHALI	1 2 3	4200-L TO 4500-L 47-R 10000 TO 12000	OUTFALLS IN SARASWATI DRAIN WHICH FURTHER OUT FALLS IN RIVER GHAGGAR	

Sr. No.	NAME OF DRAIN ETC. WITH LENGTH	DISCHARGE (IN CS.)	ORIGINATING FROM	POINT NO.	OUT FALLING AT	SHORT NOTE/REMARKS	S.T.P .
2	OLD GHAGGAR CREEK DRAIN FROM RD 0 TO 56730	5.40 CS.	CHEEKA CITY	4	56000-40000	DIRECTLY OUTFALLS IN RIVER GHAGGAR.	STP
3	GEONG LINK DRAIN FROM RD 0 TO 17300	12 CS. 8 CS.	ABADI OF KAITHAL CITY. ABADI OF BILLAGE GEONG.	5 6	21000-6000 34000 TO 32000	OUTFALLS IN AMIN DRAIN AT RD 29785-R WHICH FURTHER OUTFALLS AT RD 82000 KAITHAL DRAIN. KAITHAL DRAIN OUTFALLS IN RIVER GHAGGAR NEAR KHANOURI (PUNJAB).	
4	DEVIGARH LINK DRAIN FROM RD 0 TO 12000	8 CS.	ABADI OF KAITHAL CITY.	7	12000 TO 8000	OUTFALLS IN AMIN DRAIN AT RD 37700-R WHICH FURTHER OUTFALLS AT RD 82000 KAITHAL DRAN. KAITHAL DRAIN OUTFALLS IN RIVER GHAGGAR NEAR KHANOURI (PUNJAB).	

Sr. No.	NAME OF DRAIN ETC. WITH LENGTH	DISCHARGE (IN CS.)	ORIGINATING FROM	POINT NO.	OUT FALLING AT	SHORT NOTE/REMARKS	S.T.P .
5	KAITHAL DRAIN FROM RD 0 TO 163600	3 CS. 15 CS. 12 CS. 12 CS. 3 CS. 1 CS. 0.25 CS. 1 CS. 1 CS. 1 CS. 0.50 CS.	HCTM COLLEGE KAITHAL VILLAGE KEORAK VILLAGE UJHANA. VILLAGE JAGDISHPURA. FROM HUDA COLONY KAITHAL GADLA DERA KAITHAL CARD BOARD MILL KAITHAL CITY (PUBLIC HEALTH DEPTT.) KAITHAL CITY (PUBLIC HEALTH DEPTT.) VILLAGE QUTABPUR (SEWRAGE WATER) BILLAGE GUHNA (SEWRAGE WATER)	8 9 10 11 12 13 14 15 16 17 18	140000-R 151800-L 142500-R 138000-L 132800-L U/S 121000-L D/S 120000-R 123500-R 114200-L U/S 91900-L D/S 56500-R U/S	KAITHAL DRAIN OUTFALLS IN RIVER GHAGGAR NEAR KHANOURI (PUNJAB)	STP, STP
6	PATIALA NADI	15 CS.	PATIALA CITY	19	NEAR VILLAGE BHATIAN	PATIALA NADI OUTFALL NEAR VILLAGE BHATIAN	
7	SARASWATI DRAIN FROM RD 0 TO 101000	25 CS. 10 CS.	CARD BOARD FACTORY VILLAGE SOTHA.	20 21	67500-R 23400-R	SARASWATI DRAIN OUTFALLS IN PARA RIVER WHICH FURTHER OUTFALLS IN RIVER GHAGGAR	
8	MANAS DRAIN FROM RD 0 TO 19500	5 CS.	KAITHAL CITY	22	19500	OUTFALLS IN KAITHAL DRAIN AT RD 111900 WHICH FURTHER OUTFALLS IN	

Sr. No.	NAME OF DRAIN ETC. WITH LENGTH	DISCHARGE (IN CS.)	ORIGINATING FROM	POINT NO.	OUT FALLING AT	SHORT NOTE/REMARKS	S.T.P .
						RIVER GHAGGAR NEAR KHANOURI (PUNJAB).	
9	MAGO MAJRI DRAIN FROM RD 0 TO 24100	1 CS.	VILLAGE KHANPUR	23	24100	OUTFALLS IN KAITHAL DRAIN AT RD 111900 WHICH FURTHER OUTFALLS IN RIVER GHAGGAR NEAR KHANOURI (PUNJAB).	
10	SILLA KHARA DRAIN FROM RD 0 TO 9700	5 CS.	KAITHAL CITY	24	9700	OUTFALLS IN KAITHAL DRAIN AT RD 102000 WHICH FURTHER OUTFALLS IN RIVER GHAGGAR NEAR KHANOURI (PUNJAB).	
11	OLD MANAS LINK DRAIN FROM rd 0 TO 18500	2 CS.	VILLAGE MANAS	25	18500	OUTFALLS IN KAITHAL DRAIN AT RD 92000 WHICH FURTHER OUTFALLS IN RIVER GHAGGAR NEAR KHANOURI (PUNJAB).	
12	AMIN DRAIN RD. 0-140000	8.5 CS.	KAITHAL CITY JIND ROAD	26	RD.29500	OUTFALLS IN AMIN DRAIN WHICH FURTHER OUTFALLS IN KAITHAL DRAIN AND KAITHAL DRAIN	STP

Sr. No.	NAME OF DRAIN ETC. WITH LENGTH	DISCHARGE (IN CS.)	ORIGINATING FROM	POINT NO.	OUT FALLING AT	SHORT NOTE/REMARKS	S.T.P .
						OUTFALLS GHAGGAR RIVER	
13	PUNDRI DRAIN NO. 1	5 CS.	JATERI ROAD PUNDRI FATEHPUR ROAD PUNDRI	27	RD.27500	PUNDRI DRAIN NO. 1 OUTFALL IN AMIN DRAIN AND AMIN DRAIN OUTFALL IN KAITHAL DRAIN AND KAITHAL DRAIN OUTFALL IN GHAGGAR RIVER	STP
	TOTAL	163.04CS					

Kurukshetra

SR. NO.	NAME OF DRAIN	SOURCE OF UNTREATED DISCHARGE TO DRAINS	ULTIMATELY DISCHARGE GOING TO DRAIN REACHES TO	AVERAGE FLOW
1	EFFLUENT OF VILLAGE ABADI MALIKPUR OF 4 NO. NALLAH IN LENGTH 350 FT	WASTE WATER OF ABADI OF VILLAGE MALIKPUR	MARKANDA RIVER	5.00 CS
2	EFFLUENT OF VILLAGE ABADI KALSANA OF 6 NO. NALLAH IN LENGTH 400 FT	WASTE WATER OF ABADI OF VILLAGE KALSANA	MARKANDA RIVER	11.00 CS
3	EFFLUENT OF VILLAGE ABADI KATWA OF 1 NO. NALLAH IN LENGTH 200 FT	WASTE WATER OF ABADI OF VILLAGE KATWA	MARKANDA RIVER	3.00 CS
4	EFFLUENT OF VILLAGE ABADI TANGOR OF 1 NO. NALLAH IN LENGTH 4000 FT	WASTE WATER OF ABADI OF VILLAGE TANGOR	MARKANDA RIVER	8.00 CS
5	EFFLUENT OF VILLAGE ABADI JHANSA OF 1 NO. NALLAH IN LENGTH 200 FT	WASTE WATER OF ABADI OF VILLAGE JHANSA	MARKANDA RIVER	5.00 CS
6	EFFLUENT OF VILLAGE ABADI MOHMADSHAH OF 1 NO. NALLAH IN LENGTH 200 FT	WASTE WATER OF ABADI OF VILLAGE MOHMADSHAH	MARKANDA RIVER	2.00 CS

SR. NO.	NAME OF DRAIN	SOURCE OF UNTREATED DISCHARGE TO DRAINS	ULTIMATELY DISCHARGE GOING TO DRAIN REACHES TO	AVERAGE FLOW
7	PIPE LINE FROM JALBHERA VILLAGE RD 0 TO 2000 IN LENGTH 2000	WASTE WATER	MARKANDA RIVER	2.00 CS
8	ISMAILABAD DRAIN IN LENGTH 41830	WASTE WATER/RAIN WATER OF ISMAILABAD, CHAMMU, THASKA MIRAJI, TABRA, NAISI.	MARKANDA RIVER	50.00 CS
9	JAKHWALA DRAIN FORM RD 0 TO 14000 IN LENGTH 14000	RAIN WATER OF TANGOLI, JAKHWALA, TEOKAR ETC.	MARKANDA RIVER	150.00 CS
10	PUMP HOUSE AT RD 62500	RAIN WATER OF AGRICULTURAL FIELD OF VILLAGES TEOKAR, MOHANPUR, KARAH.	MARKANDA RIVER	10.00 CS
11	KARAH DRAIN RD 0 TO 5800 IN LENGTH 5800	MARKANDA RIVER	MARKANDA RIVER	142.00 CS
			TOTAL	388.0 CS

Ambala

SR. NO.	NAME OF TOWN/CITY	NAME OF DRAIN LENGTH/ DISCHARGE	SOURCES OF UNTREATED/TREATED DISCHARGE TO DRAINS	ACTUAL LOCATION OF TREATED/UNTREATED DISCHARGE MEETING THE DRAIN	IN TAKE RD & DISCHARGE	ULTIMATELY DISCHARGE GOING TO DRAIN REACHES TO	APPROX. QUANTITY OF DISCHARGE / DAY
1	AMBALA CITY	AMBALA DRAIN (48600FT, 250 CS.)	MC AREA OF AMBALA CITY I.E. HOUSING BOARD COLONY, GETA COLONY, BALDEV NAGAR, JAGGI COLONY, MOTOR MARKET, MANMOHAN NAGAR, DEVI NAGAR ETC.	(A) ACTUAL LOCATION OF TREATED DISCHARGE (I) BALDEV NAGAR STP (II) DEVI NAGAR STP (B) ACTUAL LOCATION OF UNTREATED DISCHARGE (I) VARIOUS POINTS IN BELOW SAID AREAS MC AREA OF AMBALA CITY I.E. HOUSING BOARD COLONY, GEETA COLONY, BALDEV NAGAR, JAGGI COLONY, MOTOR MARKET, MANMOHAN NAGAR, DEVI NAGAR ETC.	22000FT., 6.75 MLD 5900 FT., 2.25 MLD	GHAGGAR RIVER AS SHOWN IN MAP	TREATED IN 9 MLD AND UNTREATED 20.35 MLD
2	AMBALA CITY	GHEL DRAIN 4.173 KM DS. 150 CS.	MC AREA OF AMBALA CITY I.E. NAYA GAON, VILLAGE KALU MAJRA, VILLAGE GHEL	A) ACTUAL LOCATION OF TREATED DISCHARGE I) MOTI NAGAR STP II) NAYA GAON STP B) VARIOUS POINTS IN BELOW SAID AREA MC AREA OF AMBALA CITY I.E. COURT ROAD AREA AND NAYAGAON, VILLAGE KALU MAJRA AND GHEL	3.75KM, 7 MLD 2.80KM, 5MLD 4.190KM TO 1KM, 12.45 MLD	GHAGGAR RIVER AS SHOWN IN MAP	TREATED IN 12 MLD AND UNTREATED 12.45 MLD

SR. NO.	NAME OF TOWN/CITY	NAME OF DRAIN LENGTH/ DISCHARGE	SOURCES OF UNTREATED/TREATED DISCHARGE TO DRAINS	ACTUAL LOCATION OF TREATED/UNTREATED DISCHARGE MEETING THE DRAIN	IN TAKE RD & DISCHARGE	ULTIMATELY DISCHARGE GOING TO DRAIN REACHES TO	APPROX. QUANTITY OF DISCHARGE / DAY
3	AMBALA CITY	GHEL DRAIN (4300 FT, 29.64 CS.)	DRAIN NEAR HIRA NAGAR, SA JAIN COLLEGE AMBALA CITY	GHEL	NIL	GHAGGAR RIVER	7.34 MLD
4	VILL. NAGGAL	OUTFALL LINK DRAIN (2800 FT, 2111 CS.)	THE DISCHARGE OF SULLAR DRAIN, CHAURMASTPUR DARIN KHERA NADYALI OUTFALL IN SYL PARALLEL AND SYL PARALLEL DRAIN OUTFALL IN OUTFALL LINK DRAIN, GANDA NALLAH OUTFALL IN OUTFALL LINK DRAIN AND THERE AFER OUTFALL LINK DRAIN FALLS IN RIVER TANGRI	1. SULLAR DRAIN OUTFALL IN SYL PARALLEL 2. CHAURMASTPUR OUTFALL IN SYL PARALLEL 3. KHERA NADYALI OUTFALL IN SYL PARALLEL 4. SYL DRAIN OUTFALL IN OUTFALL LINK DRAIN 5. GANDHA NALLAH OUTFALL IN OUTFALL LINK DRAIN	28431 FT, 244 CS, 18588 FT. 52CS. 1900FT., 87 CS 1900 FT., 902 CS. 2800FT., 588 CS.	OUTFALL IN RIVER TANGRI	97.84 MLD
5	AMBALA CANT	MAHESH NAGAR DRAIN (42000 FT., 326 CS.)	VILLAGE NAGLA, BOH	RIVER TANGRI AMBALA-SAHARNPUR RAILWAY LINE.	NIL	RIVER TANGRI	85.61 MLD
6	AMBALA CANT	LINK DRAIN (2585 FT., 80 CS.)	UPSTREAM RD 26000 OF MAHESH NAGAR DRAIN	RIVER TANGRI OPPOSITE RD 10900 OF BABYAL BUND	NIL	RIVER TANGRI	-

Sirsa

Sr. No.	Name of Division	Constituency	Name of Drains	Discharge	Length	Outfall RD.	Name of Village
1	Ghaggar W/s Division, Sirsa	Kalanwali	Rori Ghaggar Drain	75.00 CS	130750 FT.	63280/R R/Ghaggar just U/s Rly line	Sharani, Burj Bhangu, Baragudha, Biruwala, Gudha Jhorrohi, Desu Khurd, Thiraj, Phaggu, Rohan, Rori, Surtia
2	Ghaggar W/s Division, Sirsa	Kalanwali	Drain No. 1, Jhorar Rori	2.00 CS	3500 FT.	RD. 62280/L Rori Ghaggar Drain	Jhorar Rohi

Sr. No.	Name of Division	Constituency	Name of Drains	Discharge	Length	Outfall RD.	Name of Village
3	Ghaggar W/s Division, Sirsa	Kalanwali	Surtia Link Dr. No. II	5.00 CS	7500 FT.	RD. 114450/R Rori Ghaggar Drain	Surtia
4	Ghaggar W/s Division, Sirsa	Kalanwali	Surtia Sub Link Drain No. I	5.00 CS	53 FT.	RD. 6650/R Surtia Link Drain No. II	Surtia
5	Ghaggar W/s Division, Sirsa	Kalanwali	Surtia Sub Link Drain No. II	5.00 CS	4600 FT.	RD. 6950/R Surtia Link Drain No. II	Surtia
6	Ghaggar W/s Division, Sirsa	Kalanwali	Surtia Sub Link Drain No. III	1.00 CS	800 FT.	RD. 1900/L Surtia Sub Link Drain No. II	Surtia
7	Ghaggar W/s Division, Sirsa	Kalanwali	Rania Link Drain	51.00 CS	13000 FT.	RD. 47950/R River Ghaggar D/s Ottu Weir	Patti Kirpal, Sheku Khera, Nagriana

4. Regular monitoring of industries by STF and action against violators

The State Government has already constituted Special Task Force (STF) at District level, with Deputy Commissioner of the concerned District and Superintendent of Police and nominee of District Judge and Regional Officer of HSPCB as Members of the task force. This STF has been mandated to identify persons responsible for violation of law and norms relating to pollution in rivers and to conduct surprise inspections of polluting sources.

5. Dredging & de-silting of drains in the cities.

As per the directions of Hon'ble NGT, Urban Local Bodies Department and Irrigation Department have been directed to regularly conduct the exercise of de-silting and repairs of drains under their jurisdiction and the details on its compliance will be reviewed in its meeting and at State Level by the Chief Secretary. ULB Department has also been directed to prepare a detailed plan for the process along with the financial requirements and funding sources.

6. Providing Sewerage in un-sewered area of unapproved colonies

There are many unapproved areas in most of the towns where sewage has not been tapped. The task of tapping and treat the same before its outfall into the drain/river, the ULBD was directed to provide a time bound plan and it has prepared the following plan with specific time frames for specific towns of Haryana, as below.

Sr. No.	Name of MC	Date of which compliance shall be made
1	Ambala	31.12.2020
2	Hisar	31.12.2019
3	Panchkula	31.12.2019

Sr. No.	Name of MC	Date of which compliance shall be made
4	Thanesar	31.12.2019
5	kaithal	31.12.2019
6	hansi	31.12.2019
7	Fatehabad	31.12.2019
8	Tohana	31.12.2019
9	Sirsa	31.12.2019
10	Mandi Dabwali	31.12.2019
11	Jind	31.12.2019
12	Narwana	31.12.2019
13	Naraingarh	31.12.2019
14	Barara	31.12.2019
15	Shahabad	31.12.2019
16	Ladwa	31.12.2019
17	Pehowa	31.12.2019
18	Pundri	31.12.2019
19	Cheeka	31.12.2019
20	Kalayath	31.12.2019
21	Rajound	31.12.2019
22	Barwala	31.12.2019
23	Narnaund	31.12.2019
24	Uklana	31.12.2019
25	Ratia	31.12.2019
26	Bhuna	31.12.2019
27	Rania	31.12.2019
28	Kalawali	31.12.2019
29	Ellenabad	31.12.2019
30	Safidon	31.12.2019
31	Uchana	31.12.2019
32	Julana	31.12.2019
33	Jakhal	31.12.2019

7. Plan for laying of sewerage in approved colonies along river Yamuna

The sewerage network is being laid in the towns to carry the sewage to STPs for treatment. The status and the action plan alongwith target date is given in the table.

Plan of PHED and ULBD for laying of sewerage.

Sr. No.	Name of town	Deptt.	%age sewerd area	% age unsewered area		Latest status
				Approved	Unappro ved	
Ambala Circle						
1.	Ambala City	PHED	90	10	-	No ongoing work in the hand, the balance area will be covered under AMRUT scheme by the Municipal corporation Ambala City

Sr. No.	Name of town	Deptt.	%age sewered area	% age unsewered area		Latest status
				Approved	Unapproved	
2.	Ambala Sadar	PHED	67	33	-	The 67% area of old Ambala Sadar Town excluding M.C Limit provided with sewerage system. The balance 33% approved area of old Town & 100% approved area of extended M.C Limit (63 Nos approved colonies) is not provided with sewerage system. However the works for laying of sewerage facilities in unsewered area is being monitored / executed by Urban Local Bodies itself.
3.	Naraingarh	PHED	92	08	-	Estimate for laying of sewer in balance approved area, is under preparation and work will be completed by 31.03.2020.
4.	Barara	PHED	0	0	-	The work for laying of sewerage network is in progress. The completion date of the project is 30.04.2020.
5.	Kalka	PHED	95	5	-	Work in balance 5% area held up due to non availability of land for construction of 2 MLD and 0.30 MLD STP at Kalka.
6.	Pinjore	PHED	95	-	5	Sewer has been laid in approved area but not commissioned in 5% approved area, as case for site for construction of IPS has been taken up with Director, Horticulture and case is under process.
Hisar Circle						
7.	Barwala	PHED	85	15	-	Estimate for laying of sewer in balance approved area, is under preparation and work will be completed by 31.03.2020.
8.	Hansi	PHED	92	-	8	Work completed.
9.	Narnaund	PHED	90	10	-	Estimate for laying of sewer in balance approved area, is under preparation and work will be completed by 31.03.2020.
10.	Uklana	PHED	90	10	-	Balance work in progress and will be completed upto 31.03.2019.
Jind Circle						
11.	Jind	PHED	88%	10%	2%	Work for laying of sewer lines in approved area of the Town is in progress and likely to be completed up to 31.05.2019.

Sr. No.	Name of town	Deptt.	%age sewered area	% age unsewered area		Latest status
				Approved	Unapproved	
12.	Julana	PHED	92%	6%	2%	Estimate for laying of sewer in balance approved area, is under preparation and work will be completed by 31.03.2020.
13.	Narwana	PHED	92%	2%	6%	Work for laying of sewer lines in approved area of the Town is in progress and likely to be completed up to 31.03.2019.
14.	Safidon	PHED	80%	20%	0%	Work for laying of sewer lines in approved area of the Town is in progress and likely to be completed up to 30.06.2019.
15.	Uchana	PHED	94%	01%	5%	Work for laying of sewer lines in approved area of the Town is in progress and likely to be completed up to 31.03.2019.
Kaithal Circle						
	Cheeka	PHED	82	10	8	Balance work in progress and will be completed upto 31.03.2019.
16.	Kaithal	PHED	85	5	10	85% completed & work in progress and will be completed upto 31.03.2019
17.	Kalayata	PHED	90	5	5	90% approved area completed & work in progress and will be completed upto 31.03.2019
18.	Pundri	PHED	75	5	20	75% completed & work in progress and will be completed upto 30.06.2019.
19.	Pehowa	PHED	95	0	5	Work completed
20.	Shahbad	PHED	76	10	14	76% approved area completed & work in progress and will be completed upto 30.06.2019
21.	Kurukshetra	PHED	83	6	11	83% approved area completed & work in progress and will be completed upto 30.06.2019
22.	Rajound	PHED				The town has been declared notified by ULB on 05.08.2013. The land for construction of STP was transferred by PW(B&R) Deptt to PHED but the land for augmentation of W/Ws is not available yet and without augmenting the W/s, it would not be feasible to lay sewer in the town.
Sirsa Circle						
23.	Bhuna	PHED	0%	95%	5%	Work in progress and likely to be completed 31/12/2019.

Sr. No.	Name of town	Deptt.	%age sewerage area	% age unsewered area		Latest status
				Approved	Unapproved	
24.	Ellenabad	PHED	85	5	10	Work for laying of sewer lines in approved area of the Town is in progress and likely to be completed up to 31.03.2019.
25.	Fatehabad	PHED	80	10	10	Estimate for laying of sewer in balance approved area, is under preparation and work will be completed by 31.03.2020.
26.	Kalanawali	PHED	85	-	15	Work completed
27.	Mandi Dabwali	PHED	90	-	10	Work completed
28.	Rania	PHED	85	8	7	Work for laying of sewer lines in approved area of the Town is in progress and likely to be completed up to 30.06.2019.
29.	Ratia	PHED	80	10	10	Work for laying of sewer lines in approved area of the Town is in progress and likely to be completed up to 30.06.2019.
30.	Sirsa	PHED	90	-	10	Work completed
31.	Tohana	PHED	90	5	5	Work for laying of sewer lines in approved area of the Town is in progress and likely to be completed up to 31.03.2019.
32.	Jakhal	PHED	10	90	-	Estimate for laying of sewer in balance approved area, is under preparation and work will be completed by 31.03.2021.

Town covered under AMRUT and where work is being executed by ULB

Sr. No.	Name of town	Deptt.	%age sewers area	%age unsewered area		Action plan for laying of sewerage system in approved areas
				Approved	Un-approved	
1.	Hisar	PHED	85	15	--	Work of balance approved area will be executed by ULB under AMRUT. The latest status shall be given by ULB.

8. Action Plan for STPs

The action plan for the STPs along river Yamuna is given in the table:-

Existing STPs

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Existing STP and Capacity (MLD)
1	Ambala	Naya Gaon, Unit-I, Ambala City	PHED	3.25

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Existing STP and Capacity (MLD)
2	Ambala	Naya gaon, Unit-II, Ambala City	PHED	3.25
3	Ambala	Baldev Nagar, Unit-I, Ambala City	PHED	5
4	Ambala	Baldev Nagar, Unit-II, Ambala City	PHED	3.25
5	Ambala	Moti Nagar, Unit-I, Ambala City	PHED	5
6	Ambala	Moti Nagar, Unit-II, Ambala City	PHED	5
7	Ambala	Modal Town, Ambala City	PHED	6
8	Ambala	Nasirpur, Ambala City	PHED	3.25
9	Ambala	Sadopur	PHED	0.25
10	Ambala	Devi Nagar, Ambala City	PHED	3.25
11	Ambala	Naraingarh	PHED	3
12	Kurukshetra	Modal Town, Pehowa	PHED	8
13	Kurukshetra	Ladwa Road, Shahbad	PHED	11.5
14	Kurukshetra	Indri Road, Ladwa	PHED	7
15	Panchkula	Kalka	PHED	4.5
16	Panchkula	Kalka	PHED	0.25
17	Panchkula	Nalagarh Road, Pinjore	PHED	5
18	Jind	Jind	PHED	15
19	Jind	Narwana	PHED	3.5
20	Jind	Narwana	PHED	3.75
21	Jind	Narwana	PHED	2.6
22	Jind	Uchana	PHED	2
23	Jind	Uchana	PHED	1.5
24	Jind	Jind	PHED	5
25	Jind	Safidon	PHED	9
26	Jind	Julana	PHED	4
27	Kaithal	Cheeka	PHED	10
28	Kaithal	Jind Road, Kaithal	PHED	10
29	Kaithal	Manas Road, Kaithal	PHED	10
30	Kaithal	Manas Road, Kaithal	PHED	10
31	Kaithal	Kalayath	PHED	5
32	Kaithal	Pundri	PHED	3.5

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Existing STP and Capacity (MLD)
33	Hisar	Dhani Kushal, Bhiwani Road, Hansi	PHED	5
34	Hisar	Lalpura- Jind Road, Hansi	PHED	7.5
35	Hisar	Dhani Gram, Barwala	PHED	6
36	Hisar	Azad Nagar, Rajgarh Road Hisar	PHED	15
37	Hisar	Rishi Nagar, Hisar	PHED	40
38	Hisar	Hisar	PHED	4
39	Hisar	Uklana	PHED	6.5
40	Sirsa	Chautala Road, Dabwali	PHED	16.5
41	Sirsa	Shamsabad patti, Kalaria Road, Sirsa	PHED	15
42	Sirsa	Vill. Nattar 1, Sirsa	PHED	5
43	Sirsa	Vill. Nattar 2, Sirsa	PHED	5
44	Sirsa	Daddu Road, Kalanwali	PHED	9.5
45	Sirsa	Ellenabad	PHED	7.5
46	Sirsa	Rania	PHED	6
47	Fatehabad	Vill. Bhodia Khera, Bhattu Road, Fatehabad	PHED	10
48	Fatehabad	Vill.Amani, Tohana, Distt. Fatehabad	PHED	10
49	Fatehabad	Ratia	PHED	6.5
	HSVP			342.6
1	Ambala	Sec-7, Urban Estate, Ambala City	HSVP	2
2	Panchkula	Sec-20, Panchkula	HSVP	18
3	Panchkula	Sec-20, Panchkula	HSVP	39
4	Panchkula	Sec-28, Panchkula	HSVP	15
5	Jind	Jind	HSVP	10
6	Kaithal	Kaithal	HSVP	7.5
7	Hisar	Dabara Tosham Road, Hisar	HSVP	15
8	Fatehabad	Village Majra	HSVP	10

STPs under construction

Sr. No.	Name of the district	Name of the town/city	Deptt.	capacity (MLD)	Date of Completion of construction
	PHED				
1	Kurukshetra	Thanesar	PHED	25	31.3.2019
2	Hisar	Narnaund	PHED	4	31.05.2018
3	Hisar	Hansi	PHED	6.5	31.12.2018
4	Fatehabad	Fatehabad	PHED	5	31.10.2018
5	Ambala	Barara	PHED	4	30.06.2019
6	Jind	Jind	PHED	5	30.06.2019
	HUDA				
1	Kurukshetra	Sec-6, Urban Estate, Thanesar	HUDA	15	31.12.2020
2	Ambala	Sec-21 Urban Estate, Ambala City	HUDA	5	30.04.2019
				20	
	ULBD				
1	Ambala Cantt	12 Cross Road	ULB	12	November, 2019
2	Ambala Cantt	Village Nagal	ULB	12	November, 2019
3	Panchkula	Khagesara & Taka	ULB	0.5	December, 2019
4	Panchkula	Nangal & Allipur	ULB	0.5	December, 2019
5	Panchkula	Khatoli	ULB	0.75	December, 2019
6	Panchkula	Kot	ULB	0.75	December, 2019
7	Panchkula	Billa	ULB	0.75	December, 2019
8	Panchkula	Sukhdarshanapur	ULB	0.75	December, 2019
9	Panchkula	Ramgarh	ULB	1	December, 2019
10	Panchkula	Tipra (Khanguwala)	ULB	1	December, 2019

11	Panchkula	Saketri	ULB	1.5	December, 2019
12	Hisar	Village Dabra	ULB	8	
				39.5	

Status of Under Proposal STPs

Sr. No.	Name of the district	Name of the town/city	Deptt.	Capacity (MLD)	Date of Start of construction and completion
	HSVP				
1	Ambala	Sector-32, Ambala City	HSVP	5	31.12.2021
2	Ambala	Naraingarh	HSVP	1	30.09.2022
3	Panchkula	Pinjore	HSVP	8	30.4.2023
4	Jind	Jind	HSVP	5	30.06.2023
5	Hisar	Hansi	HSVP	5	30.06.2025
6	Hisar	Hisar	HSVP	10	31.3.2024
7	Hisar	Hisar	HSVP	5	30.06.2024
8	Sirsa	Sirsa	HSVP	7.5	30.06.2023
	ULBD				
1	Ambala	village Babyal	ULB	10	
2	Ambala	Sector-32, 33, 34 Ambala	ULB	5	

9. Action Plan for CETPs

The action plan for each CETP is given in the table.

Status of recycling in existing CETPs				
Sr.No.	Name of the district	Name of the town/city	Deptt.	Capacity (MLD)
1	Panchkula	IE Barwala, Panchkula	HSI IDC	0.5
2	Ambala	Ambala Cantt.	HSI IDC	0.5
3	Ambala	Growth Centre, Saha	HSI IDC	5
4	Jind	I. E. Jind	HSI IDC	0.1

Under Proposal of CETPs

Sr. No.	Name of the district	Name of the town/city	Deptt.	Capacity (MLD)	Date of start of construction
1	Jind	IE Narwana	HSI IDC	1.5	30.06.2020
2	Sirsa	IDDC, Sirsa	HSI IDC	1.5	30.06.2020

10. Online Monitoring Devices

The plan for installation of Online Monitoring Devices at STPs is given as under.

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Capacity (MLD)	Target Date for installation of OMD
1	Ambala	Naya Gaon, Unit-I, Ambala City	PHED	3.25	Installed
2	Ambala	Naya gaon, Unit-II, Ambala City	PHED	3.25	31.03.2019
3	Ambala	Baldev Nagar, Unit-I, Ambala City	PHED	5	Installed
4	Ambala	Baldev Nagar, Unit-II, Ambala City	PHED	3.25	31.03.2019
5	Ambala	Moti Nagar, Unit-I, Ambala City	PHED	5	31.03.2019
6	Ambala	Moti Nagar, Unit-II, Ambala City	PHED	5	31.03.2019
7	Ambala	Modal Town, Ambala City	PHED	6	Installed
8	Ambala	Nasirpur, Ambala City	PHED	3.25	31.03.2019
9	Ambala	Sadopur	PHED	0.25	31.03.2019
10	Ambala	Devi Nagar, Ambala City	PHED	3.25	31.03.2019
11	Ambala	Naraingarh	PHED	3	31.03.2019
12	Kurukshetra	Modal Town, Pehowa	PHED	8	31.03.2019
13	Kurukshetra	Ladwa Road, Shahbad	PHED	11.5	31.03.2019
14	Kurukshetra	Indri Road, Ladwa	PHED	7	31.03.2019
15	Panchkula	Kalka	PHED	4.5	31.03.2019
16	Panchkula	Kalka	PHED	0.25	31.03.2019
17	Panchkula	Nalagarh Road, Pinjore	PHED	5	31.03.2019
18	Jind	Jind	PHED	15	31.03.2019
19	Jind	Narwana	PHED	3.5	31.03.2019
20	Jind	Narwana	PHED	3.75	31.03.2019
21	Jind	Narwana	PHED	2.6	31.03.2019
22	Jind	Uchana	PHED	2	31.03.2019
23	Jind	Uchana	PHED	1.5	31.03.2019
24	Jind	Jind	PHED	5	31.03.2019
25	Jind	Safidon	PHED	9	31.03.2019
26	Jind	Julana	PHED	4	31.03.2019
27	Kaithal	Cheeka	PHED	10	31.03.2019
28	Kaithal	Jind Road, Kaithal	PHED	10	Installed

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Capacity (MLD)	Target Date for installation of OMD
29	Kaithal	Manas Road, Kaithal	PHED	10	Installed
30	Kaithal	Manas Road, Kaithal	PHED	10	Installed
31	Kaithal	Kalayath	PHED	5	Installed
32	Kaithal	Pundri	PHED	3.5	31.03.2019
33	Hisar	Dhani Kushal, Bhiwani Road, Hansi	PHED	5	31.03.2019
34	Hisar	Lalpura- Jind Road, Hansi	PHED	7.5	31.03.2019
35	Hisar	Dhani Gram, Barwala	PHED	6	31.03.2019
36	Hisar	Azad Nagar, Rajgarh Road Hisar	PHED	15	31.03.2019
37	Hisar	Rishi Nagar, Hisar	PHED	40	Installed
38	Hisar	Hisar	PHED	4	31.03.2019
39	Hisar	Uklana	PHED	6.5	Installed
40	Sirsa	Chautala Road, Dabwali	PHED	16.5	31.03.2019
41	Sirsa	Shamsabad patti, Kalaria Road, Sirsa	PHED	15	31.03.2019
42	Sirsa	Vill. Nattar 1, Sirsa	PHED	5	31.03.2019
43	Sirsa	Vill. Nattar 2, Sirsa	PHED	5	31.03.2019
44	Sirsa	Daddu Road, Kalanwali	PHED	9.5	31.03.2019
45	Sirsa	Ellenabad	PHED	7.5	31.03.2019
46	Fatehabad	Vill. Bhodia Khera, Bhattu Road, Fatehabad	PHED	10	31.03.2019
47	Fatehabad	Vill.Amani, Tohana, Distt. Fatehabad	PHED	10	31.03.2019
48	Fatehabad	Ratia	PHED	6.5	31.03.2019
		HSVP			
1	Ambala	Sec-7, Urban Estate, Ambala City	HSVP	2	31.03.2019
2	Panchkula	Sec-20, Panchkula	HSVP	18	Installed
3	Panchkula	Sec-20, Panchkula	HSVP	39	Installed

Sr. No.	Name of the district	Name of the town/ city	Deptt.	Capacity (MLD)	Target Date for installation of OMD
4	Panchkula	Sec-28, Panchkula	HSVP	15	Installed
5	Jind	Jind	HSVP	10	Installed
6	Kaithal	Kaithal	HSVP	7.5	Installed
7	Hisar	Dabara Tosham Road, Hisar	HSVP	15	31.03.2019
8	Fatehabad	Village Majra	HSVP	10	Installed
Status of Online Monitoring Devices by CETPs					
Sr.No.	Name of the district	Name of the town/city	Deptt.	Capacity (MLD)	Online data
1	Panchkula	IE Barwala, Panchkula	HSI IDC	0.5	31.03.2019
2	Ambala	Ambala Cantt.	HSI IDC	0.5	31.03.2019
3	Ambala	Saha	HSI IDC	5	installed
4	Jind	I. E. Jind	HSI IDC	0.1	31.03.2019

11. Plan for Integrated Solid Waste Management (ISWM) of 7 Clusters (Falling in Yamuna Catchment Area)

The ISWM projects for towns along river Yamuna are being implemented by ULBD. The action plan is given in the table.

Sr. No	Name of Cluster & Cluster ULBs	Waste Generated (In TPD)/ Technology	Expected Release Date of Tender	Expected Completion Date of Project	Current Status/ Justification
1	Ambala (Bhandwari Gurugram) For <ul style="list-style-type: none"> • Ambala • Cheeka • Pehowa • Thanesar • Shahbad 	1275 Waste to Energy	Tender Invited	24 months from the date of signing of agreement	<ul style="list-style-type: none"> • Both the clusters will have separate processing facility and the RDF generated in Karnal will be transported to Ambala waste to energy plant. • There is an existing waste to compost plant in Karnal. • The tender for Ambala - ISWM shall be invited again and the existing plant in Karnal will be modernized and upgraded to cater the waste of all the cluster ULB and a new plant in Ambala will be setup. • Until ISWM project is awarded, door to door collection, segregation, pit composting and MRF facilities will be developed in the ULBs for which time bound strategy is being formulated.
2	Fatehabad, (Bhuna)	120 Waste to	Tender released on	12 months from the date	<ul style="list-style-type: none"> • Until ISWM project is awarded, door to door collection,

Sr. No	Name of Cluster & Cluster ULBs	Waste Generated (In TPD)/ Technology	Expected Release Date of Tender	Expected Completion Date of Project	Current Status/ Justification
	For <ul style="list-style-type: none"> • Bhuna • Fatehabad • Ratia • Tohana • Ukalana Mandi • Jakhal 	compost + RDF	05.01.2018 and bid evaluation is under process	of signing of agreement	segregation, pit composting and MRF facilities will be developed in the ULBs for which time bound strategy is being formulated.
3	Hisar (Hisar) For <ul style="list-style-type: none"> • Hisar • Barwala • Hansi • Narnaund • Siwani 	262 Waste to Compost + RDF	November, 2018	12 months from the date of signing of agreement	<ul style="list-style-type: none"> • TFR under finalization • Until ISWM project is awarded, door to door collection, segregation, pit composting and MRF facilities will be developed in the ULBD for which time bound strategy is being formulated.
4	Jind (Not identified) For <ul style="list-style-type: none"> • Assand • Jind • Kaithal • Kalayat • Narwana • Rajund • Safidon • Uchana 	270 Waste to Compost+R DF	Dec. 2018	12 Months from the date of signing of agreement	<ul style="list-style-type: none"> • TFR under finalization • Until ISWM project is awarded, door to door collection, segregation, pit composting and MRF facilities will be developed in the ULBD for which time bound strategy is being formulated.
5	Panchkula (Jhuriwala) For <ul style="list-style-type: none"> • Panchkula • Narraingarh 	186 Waste to Compost+R DF	Tender released on 05.01.2018 and bid received	12 Months from the date of signing of agreement	<ul style="list-style-type: none"> • bid evaluation has been done and project shall be awarded soon.
6	Punhana (Punhana) For <ul style="list-style-type: none"> • F/Jhirkha • Hathin • Hodel • Palwal • Punhana 	136 Waste to Compost+R DF	Nov, 2018	12 Months from the date of signing of agreement	<ul style="list-style-type: none"> • The tender will be invited Soon, TFR under finalization. • Until ISWM project is awarded, door to door collection, segregation, pit composting and MRF facilities will be developed in the ULBD for which time bound strategy is being formulated.
7	Sirsa (Dabwali) For <ul style="list-style-type: none"> • Dabwali • Ellenabad • Kalanwali 	177 Waste to Compost+R DF	Dec., 2018	12 Months from the date of signing of agreement	<ul style="list-style-type: none"> • Processing and scientific disposal site will come at existing waste processing plant in Sirsa of area 13 acre. • Until ISWM project is awarded, door to door collection,

Sr. No	Name of Cluster & Cluster ULBs	Waste Generated (In TPD)/ Technology	Expected Release Date of Tender	Expected Completion Date of Project	Current Status/ Justification
	<ul style="list-style-type: none"> • Rania • Sirsa 				segregation, pit composting and MRF facilities will be developed in the ULBD for which time bound strategy is being formulated.

12. Plan for e-waste management by HSPCB/ULBD.

Present Scenario

A study was conducted through CSIR-NEERI in the year 2010 and accordingly the total quantity of waste Electrical & Electronic equipments generated in Haryana is **4506.9 Ton**. In the State, there are **22** number of authorized refurbishers, dismantlers and recyclers for management of E-waste. The total authorized capacity of these units is **91389 MT/annum** which is approx. **1.8** times more than the waste generation in the State.

Future Course of Action

1. Policy for E-waste Management will be prepared within 3 months.
2. The E-waste collection bins has been proposed to be placed at the prominent places like Govt. offices, IT Parks etc.

13. Plan for plastic waste management by HSPCB/ULBD.

Draft Policy and Plan for plastic waste management has been prepared by the ULBD and accordingly plastic waste shall be collected from un-organized sectors and from house hold/commercial sectors. The challans are issued to the violators.

14. Plan for Bio-Medical Waste Management.

Present scenario of Bio Medical Waste Management in Haryana

Total number of HCFs in the State	:	3412
Total number of Bedded HCFs	:	2410
Total number of Non Bedded HCFs	:	1039
Total number of Beds in HCFs	:	48357
Total BMW waste generated in State	:	11732 Kg/ day

For the treatment of this Bio medical Waste, **11** no. of Common Bio medical Waste Treatment Facilities (CBWTFs) has been authorized in the State. The total incineration capacity of these CBWTFs to treat Bio Medical Waste is **39600 Kg/day**. All the CBWTFs have upgraded their incinerator to meet revised emissions standards as per MOEF Notification 2016 and provided Online Continuous Monitoring System on their incinerator.

The **3393** number of Health Care Facilities made agreement with these CBWTFs for collection & disposal of their Bio Medical Waste.

The Govt. of Haryana, Environment & Climate Change Department has constituted State Level Advisory Committee (SLAC) and 1st meeting of SLAC has already been held under the Chairmanship of Additional Chief Secretary to Govt. of Haryana, Health Department-cum-Chairman of SLAC on 16.8.2018.

Future Course of action

1. Establishment of a Bar- Code System for bags or containers containing bio-medical waste will be implemented by 29.3.2019 as per CPCB guidelines.
2. All the Veterinary Hospitals, Animal Houses, Pathological Laboratories, Blood Banks & Research Institutions will be inspected and complied them as per Bio Medical Waste Rules, 2016 upto 31.3.2019.

15. Water Efficient Agriculture Practices:-

The major demand for river water is for Irrigation purposes and accordingly the State of Haryana has taken initiatives for water efficient farming practices which are given in succeeding paras and these are expected to reduce the pressure on river water.

(A) Pilot Project for installation of solar/grid powered micro irrigation infrastructure on sewage treatment plants for utilizing treated water for Irrigation.

With a view of augmenting water of assured supply to the every field, a new intervention has been proposed for the reuse of treated waste water from the existing Sewage Treatment Plants for the use of water in the best alternative which will help in enhancing the irrigation. Working on these lines this pilot project has been prepared on over exploited & critical blocks by selecting STPs of Ladwa, Shahabad and Pehowa towns for irrigation. The farmers of the area to be benefited from this water have already formed Water User Associations and also given an undertaking to the effect that their area, to be covered under this project, is not covered by any canal command and they are willing to adopt this technology. The common Micro Irrigation Infrastructure will be provided for each STP outlet for supplying pressurized water supply at farm gate by providing pumping unit (grid/solar powered), filtration, HDPE pipe network etc. the water will be provided under pressure of 2-2.5 Kg/cm² So that farmers may utilize this for sprinkler and drip system. Farmers will be provided hydrant for every 4 acres or less if the holding of the farmers is less than four acres. In this manner the treated water, which was otherwise going unutilized in drain, will be put to proper use. It is also reported that sewage water from all these STPs is being

properly monitored and tested by Public Health Engineering Department and parameters of this treated water meet with the standards for irrigation.

ADVANTAGES OF THE PROJECTS

1. New area will be brought under irrigation with optimum utilization of the available surplus water.
2. The project will encourage use of Micro Irrigation technologies.
3. Saving of power & diesel for farmers.
4. Increase in yield as nutrient rich water will be supplied.
5. The water, which was otherwise going waste, will be put to proper use.
6. No land acquisition will be involved.

Accordingly, a project has been prepared for using the treated water in Irrigation in district Kurukshetra. A common infrastructure has been provided with the following components in the command area of each outlet to be covered under Model Command Area of Jal Kranti Abhiyan:-

1. Water storage tank near outlet head.
2. Pumping Unit (Grid/Solar Powered).
3. Filtration units.
4. HDPE pipe network.
5. Hydrant/Outlet assembly.
6. Valves

Drip/Sprinkler irrigation sets will be provided 2 no./per 15 HP pump and individual farmers can also install the drip/sprinkler sets in their farm holdings by availing the benefits of subsidy from the State Horticulture/Agriculture Departments as per their existing schemes of promoting the Drip/Micro Sprinkler Systems.

The cost of common infrastructure has been worked out as Rs. 109000/- (Approx.) per hectare of CCA and the total estimated cost of the project is Rs. 3.65 Crore. Detail list of site wise schemes taken up is as under:-

Sr. No.	Name of District	Name of Block	CCA in Hectare	Cost {CCA (hct.) X 1.09 lakh}
1.	Kurukshetra	Pehowa	76	8676084
2.	Kurukshetra	Ladwa	63	7192017
3.	Kurukshetra	Shahabad	151	17238009
		Total	290	33106110

	=33106110
Add 1% Contingency Chares	= 165531
Add 15% Tender Premium	= 3310611

=36582252

SALIENT FEATURES

- Total Cost of Project Rs. 3.65 Crore
- CCA to be covered in Acre/Ha. 715/290
- No. of Sprinkler sets 01 No./ 15 HP pump
- Benefit Cost Ratio 1.3:1
- Total number of schemes 3
- Number of Districts/Villages covered 1/5
- Name of villages: Pehowa- (Pehowa, Morthli, Bhatt Majra), Ladwa- (Baraichpur) & Shahabad-(Chhapra).

(B) Project of Recycle and Reuse of Treated Wastewater for Irrigation Purpose in Fatehabad, Hisar, Sirsa & Jind Districts of Haryana.

Project was prepared under the guidelines of the scheme for "Incentivization Scheme for Bridging Irrigation Gap (ISBIG) of Ministry of water Resources, River Development and Ganga Rejuvenation, govt. of India" under components infrastructure for conveyance and additional treatment of municipal and industrial wastewater for augmenting water for the farm use "Project Under newly created Irrigation Efficiency in phasing during the financial year 2018-19 to 2020-2021 for amounting in Rs. 235.94 Crore only.

This office planned to carry out the work of Recycle and Reuse of Treated Wastewater of Irrigation Purposes from the STPs of Fatehabad, Sirsa, Hisar and Jind districts having the capacity 29.50, 15.00, 22.50 & 20.00 MLD respectively amounting to Rs. 87.00 Crore in 1st phase as planned for the year 2018-19. The estimate for this project will be prepared on the basis of already approved item rates of CADA for re-use of wastewater which are the part of the estimate and remaining item rates will be prepared on the basis of HSR and market rates. Thereafter, e-tender will be called on EPC basis towards successful commissioning plus 1 year of assured performance demonstration after commissioning and comprehensive O & M of the schemes for 3 years thereafter. A new concept A.P.O.P treatment technology for Advanced Photo Oxidation processes at STPs be adopted an intervention for disinfection, removal of endocrine disruptors and other hazardous compounds. This intervention is essentially required because all the composition of the waste water has been addressed effectively and efficiently by the MBBR & SBR treatment technologies except toxic chemical and pathogens. A high concentration of pathogens such as viruses, bacteria, helminthes eggs and fecal coliforms have the potential to cause diseases if present in a human host insufficient quantity.

District wise lit of STPs provided in the project

Sr. No.	Name of District	Name of STO	Capacity of STP (In MLD)	Treatment Technology
1.	Ambala	Barara	6.00	MBBR
2.	Ambala	Narayangarh	5.00	MBBR
3.	Bhiwani	Badra	10.00	MBBR
4.	Bhiwani	Kairu	10.00	MBBR

5.	Charkhi Dadri	Charkhi Dadri	5.00	MBBR
6.	Faridabad	Balhabgarh	18.00	MBBR
7.	Gurugram	Behrampur	50.00	MBBR
8.	Hisar	Hansi	12.50	MBBR
9.	Hisar	Hisar, Sector 3	10.00	MBBR
10.	Jhajjar	Jhajjar	5.50	MBBR
11.	Jhajjar	Salhwas	5.00	MBBR
12.	Jind	Jind	15.00	MBBR
13.	Jind	Narwana	5.00	MBBR
14.	Rewari	Rewari	6.50	MBBR
15.	Rewari	Rewari	8.00	MBBR with Dual Mode Filter
16.	Kaithal	Gulha	10.00	SBR
17.	Kaithal	Kaithal	10.00	SBR
18.	Fatehabad	Fatehabad	10.00	MBBR
19.	Fatehabad	Tohana	10.00	MBBR
20.	Fatehabad	Jakhal	3.00	SBR
21.	Fatehabad	Ratia	6.50	MBBR
22.	Karnal	Karnal	10.00	SBR
23.	Karnal	Karnal	8.00	MBBR
24.	Mahendergarh	Nangal Chaudhary	6.50	MBBR
25.	Mahendergarh	Narnaul	7.50	MBBR
26.	Mewat	Punhana	4.50	MBBR
27.	Mewat	Nuh	3.60	MBBR
28.	Panipat	Panipat	25.00	SBR
29.	Palwal	Hathin	4.50	MBBR
30.	Panchkula	Kalka	4.75	MBBR
31.	Panchkula	Pinjor	5.00	MBBR
32.	Rohtak	Rohtak	10.00	MBBR
33.	Sirsa	Sirsa	15.00	SBR
34.	Sonipat	Sector 23	10.00	MBBR
35.	Yamuna Nagar	Radaur	3.50	MBBR
	Total		338.85	

(C) INSTALLATION OF COMMUNITY BASED SOLAR/GRID POWERED MICRO IRRIGATION INFRASTRUCTURE IN EXISTING CANAL COMMANDS

The Pilot Project has been prepared by CADA for Rs. 30.60 Crore with provision for installation of community based MI schemes in commands of the 14 different canal outlets spread over 13 different district of the State covering area 2231 Hectare. The concept of community based micro-irrigation has been introduced in the first instance on pilot basis on some of the canal outlets in the command of the ongoing CADWM Projects. Common Micro Irrigation infrastructure will be provided for each canal outlet command for supplying pressurised water supply at the farm gate of each farmer of the outlet chak instead of constructing lines filed channels. Community based water storage tank, pumping unit (Grid/solar powered), filtration unit, HDPE pipe network,

hydrant/outlet assemblies, valves, etc. shall be will be constructed by the department. Drip/Sprinkler irrigation sets will be installed by the individual farmers in their farm holdings by availing the benefits of subsidy from the State Horticulture/Agriculture Departments as per their existing schemes of promoting the Drip/Sprinkler Systems.

Water User Associations (WUA) have been framed for all the water courses. The WUAs have committed to provide land for construction of community pond for storing water from outlet and supplying further to individual farmers. Further the management of the water at outlet will be completely done by the shareholders. The WUAs will help in creating healthy and cordial atmosphere between the shareholders themselves. Moreover, this will also help in developing a sense of ownership amongst the shareholders and also facilitate implementation of warabandi. A better co-ordination will emerge between the end users and the CADA department for planning, execution and monitoring of the pilot project thereby initiating proper transfer of management to farmers.

The Solar Power Systems to be installed on the various schemes under the project are proposed to be connected with the utility power grid so that the energy generated by the solar modules, whenever not required for operation of the pumping system or is in excess of requirement, can be sent to the Utility Grid and when the solar power system is producing lesser power than needed for operation of the pumping system or is not producing any power at all, additional power for operation of the pumping system can be drawn from the Grid. The provision has also been made for interconnection of the solar power systems with the utility power grid through 11 KV independent feeder lines from the nearest Sub Stations for each scheme with provision of import/export (Bi-directional) meter. The excess energy produced from the solar power systems and transferred to the utility power grid will be credited on the rate mutually agreed between the Department/WUA and DISCOM as per Government Policy against the power supplied from the utility grid.

The project will help in making an assessment of the workability of the proposed model in the State and evaluating its actual impact and benefits. The project will demonstrate to the farmers of the State the value of water and help in changing their mindset and motivating them to adopt the water efficient MI technology in canal commands on a large scale.

The main objectives of the project are to improve water use efficiency and increase crop productively. The water use efficiency will be achieved by adopting integrated approach in water management:-

- Supply management - By increasing the available supply by reduction in conveyance losses.
- Demand Management - By increasing the field application efficiency with the use of water efficient Sprinkler & Drip Irrigation technology.

Detail list of sites:-

Sr. No.	Name of District	Name of villages	Name of outlet	Outlet RD	CCA in acre	CCA in Hectare
1	Kurukshetra	Gumthala Garhu	Sandhola Minor	25220/L	147	59
2	Kaithal	Kakrala Anayat, Kakeor Majra	Paharpur Minor	44600/R	417	169
3	Sirsa	Shahpuria	Gegorani Minor	45800/R	705	285
4	Hisar	Masudpur	Singhwa Disty	25300/L	392	159
5	Ambala	Mallour	Mallour Disty	5775-R	138	56
6	Jind	Behbalpur	Ramkali Minor	53620-L	98	40
				Total		

Date of completion of the Project is 31.12.2018.

16. Increasing the Water Storage Capacity

The construction of ponds/dams/reservoir along the rivers has been explored and the action taken so far in this regard has been given by the Irrigation Department with future course of action. This will helping maintaining. The same has been given in the table. The State Government as also link the village ponds with nearby existing channels for revival of ponds. The number of ponds for each circle have been given in the table:-

Sr. No.	Bhud Dam	Khetpurali Dam	Tributary of Tangri Nadi
1	Panta and Tallanwali Nadi (Tributary of Tangri Nadi)	Tributary of Tangri Nadi	Tributary of Tangri Nadi
2	6440.00 Acre-ft	3266.79 Acre-ft	2834.66 Acre-ft
3	209 acres	113 acres	108.5 acres
4	21 Nos.	7 Nos.	-
5	9525 acres CCA	10780 acre combined with Dudhgarh	8176 acres CCA
6	1. Bahadurpur 2. Gadwan 3. Alisherpur Majra 4. Ramgarh 5. Chholi 6. Katarwall 7. Jogiwara 8. Manakpur 9. Bari Lalhari 10. Chhoti Lalhari 11. Bankat 12. Chantpur 13. Manipur 14. Khanuwala 15. Tugalpur 16. Barauli Majra 17. Arjan Majra 18. Kot Basawar Singh 19. Kot Mushtarka 20. Ghisarpari	1. Bhud 2. Kambala 3. Lashkarwala 4. Kherwali 5. Parwala 6. Murad Nagar 7. Jaintipur 8. Shampur 9. Penjawala 10. Kazimpur 11. Manak Tabra 12. Batwal 13. Bhandaru 14. Dhanda 15. Sukhdarshanpur 16. Khatauli 17. Rahawar 18. Barwala (part) 19. Batawar 20. Bhagwanpur 21. Nayagaon	1. Khetpurali 2. Dulupur 3. Ganeshpur 4. Ratewali 5. Dabkauli 6. Kanauli 7. Alipur

7	Haryana	Haryana	Haryana
8	Required	Required	Required
9	Rs. 107.75 Crore	Rs. 43.90 Cr.	Rs. 47.00 Cr.
10	0.86:1	1.97:1	0.86:1
11	Feasibility report submitted by WAPCOS and is under examination in field	Feasibility report submitted by WAPCOS on 05.09.2018 and is under examination in field	Feasibility report submitted by WAPCOS and is under examination in field

Progress report of ponds sanctioned by Department & Panchyat Department under HRDFA													
Sr. No.	Name of the circle	Name of District	Np. Of Village Ponds	Tender called / allotted	Work in progress	Completed	Yet to Start	Not feasible	Tender to be called	Not Required	Amount Sanctioned	Amount Released by HRDFA	Amount released by Irrigation Department
1	YWS Circle Jind	Jind	6	6	0	0	6	0	0	0	3005378	3005378	0
2	BWS Circle Hisar	Hisar	9	9	3	4	2	0	0	0	18783000	11759000	9230932
3	BWS Circle Kaithal	Kaithal	7	7	2	4	0	1	0	0	19903976	12695882	7266594
4	BWS Circle Sirsa	Sirsa	45	35	0	23	2	14	0	6	43104000	43373000	17842637

17. Greenery Development Plan

The action plan for greenery development in towns along river Yamuna.

HSVP

Plantation carried out/to be carried out by HSVP in its area						
Sr. No.	Name of U/E	Plantation done			Plantation to be done	
		Year 2015-16	Year 2016-17	Year 2017-18	Year 2018-19	Year 2019-20
1	Hisar	6000	3500	4770	7500	6000
2	Adampur	100	100	150	100	0
3	Agroha	0	0	0	200	0
4	Hansi	300	1550	200	1500	1000
5	Jind	5022	2840	4925	1700	1700
6	Narwana	50	0	0	100	100
7	Safidon	0	0	500	2000	2000
8	Sirsa	3395	3972	4065	5000	5000
9	Kalanwali	85	615	250	200	200
10	Ellenabad	75	0	205	100	100
11	Dabwali	50	0	0	0	0
12	Fatehabad	1590	615	1925	1000	1000
13	Ratia	50	0	0	0	0
14	Tohana	110	0	0	0	0
15	Bhattu	1310	640	710	0	0
16	Panchkula	4485	11238	6929	5000	6000
17	Ambala	3289	3800	2317	1500	500
18	Shahabad	180	155	0	0	0
19	Pehowa	639	125	0	0	0
20	Naraingarh	10	125	0	0	0
21	Kurukshetra	4448	3430	2050	2000	2500
22	MTS Gulha	210	100	0	0	0
23	MTS Pundri	85	100	0	0	0
24	Kaithal	10690	675	2120	1000	1000
25	Total	42173	33580	31116	28900	27100

Forest Department

Plantation to be undertaken on river banks by Forest Department

Sr. No.	Name of Division	No. of planted/ proposed to be planted on river banks				Remarks (Please indicate approximate expenditure for planting each plant)
		Planted		Proposed		
		2017-18	2018-19	2018-19	2019-20	
1.	Morni-Pinjore	0	5000 (TP)	0	110000 (15X22 size 20000 (TP) (30X45)	11000000/-@100/- per plants (15X22) 7500000 @ 300/- per plant (30X45) Total=18500000
2.	Ambala	0	0	0	0	15000 TP with tree guards (Rs. 440 per plant with mtc and Rs. 1400 per tree guard Total Rs. 1840 per

						plant G. Total Rs. 27600000 14000 P. Bag Plants @ Rs. 154 per plant with Mtc. Total Rs. 2156000
3.	Kurukes hetra	0	0	0	0	No. of Tall Plants 250 per RKM @ 350/- per plant
4.	Yamuna Nagar	115750	132000	0	57500	Tall Plant =Rs. 349/- per plant Small Plant= Rs. 99/- per plant (As per cost norms year 2018-19)
5.	Panipat	52911	90360	33000	22000	As per cost norms
6.	Sonepat	1000	1500	0	50000	Rs. 32 per plants (Bunds targets) Rs. 349 per plants (cities)
7.	Sirsa	22500	0	0	23000	350/- per plants
8.	Fatehab ad	0	0	0	27000	14475671
9.	Gurugra m	0	0	0	0	Rs. 350/-per plant
10.	Faridab ad	0	2700 (TP)	0	10000 (TP)	Rs. 350/- per plant

Plantation to be undertaken cities by Forest Department.

Sr. No.	Name of Division	No. of plants planted/ proposed to be planted in the cities				Remarks (Please indicate approximate expenditure for planting each plant)
		Planted		Proposed		
		2017-18	2018-19	2018-19	2019-20	
1.	Morni-Pinjore	0	0	0	5000 (TP) (30X45)	11000000/-@100/- per plants (15X22) 7500000 @ 300/- per plant (30X45) Total=18500000
2.	Ambala	6000	8000	0	15000	15000 TP with tree guards (Rs. 440 per plant with mtc and Rs. 1400 per tree guard Total Rs. 1840 per plant G. Total Rs. 27600000 14000 P. Bag Plants @ Rs. 154 per plant with Mtc. Total Rs. 2156000
3.	Kurukeshetra	9000	5500	0	20000	No. of Tall Plants 250 per RKM @ 350/- per plant
4.	Yamuna Nagar	4500	4000	0	5000	Tall Plant =Rs. 349/- per plant Small Plant= Rs. 99/- per plant (As per cost norms year 2018-19)
5.	Panipat	1500	5500			As per cost norms
6.	Sonepat	2500	5500	0	7500	Rs. 32 per plants (Bunds targets) Rs. 349 per plants (cities)
7.	Sirsa	9000	4500	0	10500	350/- per plants
8.	Fatehabad	24000	2250	750	2500	14475671

9.	Gurugram	3000 (TP)	15000 (TP)	0	50000 (TP)	Rs. 350/-per plant
10.	Faridabad	12000 (TP)	6250 (TP)	0	6000 (TP)	Rs. 350/- per plant

18. Ground Water Management

Steps taken by HSPCB

HSPCB has decided to incorporate the necessary condition in its consent management policy that the industries shall obtain NOC from Central Ground Water Authority (CGWA) before withdrawal of ground water.

Steps taken by HSVP for rain water harvesting / conservation of water/avoid exploitation of ground water

1. ROOF TOP RAIN WATER HARVESTING SCHEME

On 31.10.2001, a notification regarding making roof rain water harvesting-Conversation & Artificial recharge of ground water compulsory in Govt. buildings/HSVP Buildings, including all the private houses/buildings to be constructed in Urban Estates, in future having roof top surface area 100 Sqm. more was issued. Notification has already been circulated vide No.9945-46 dated 29.11.2001 (copy enclosed) and the areas/Urban Estates in Haryana where this notification has been made applicable have also been notified vide letter no.1200 dated 10.12.2001. (copy enclosed).

Zonal Administrator/Estate Officers of HSVP ensure that occupation certificate is not issued in the absence of the implementation of above cited notification.

Further, station wise detail of rain water harvesting systems constructed by HSVP is as under:

Sr.No.	Name of U/E	No. of rain water harvesting wells constructed
1.	Panchkula	22
2.	Kaithal	2
3.	Kurukshetra	5
4.	Jind	5
	TOTAL	47

2. INSTALLATION OF DUAL BUTTON FLUSHING CISTERN

Haryana Govt. has issued notification on 13.08.2014, making installation of dual button cisterns (capacity 10/5 Litre and 6/3 Litre) mandatory for all types of plot holders (new buildings) in HSVP areas in addition to all Govt. Buildings and Buildings in licensed areas. Occupation certificate shall not be issued in the absence of dual button flushing cisterns in these buildings.

3. GRADED TARIFF FOR ECONOMIC USE OF WATER

The graded water tariff has been implemented in various Urban Estates in Haryana for economical domestic use of water.

4. REUSE OF TERTIARY TREATED / RECYCLED WATER

To avoid exploitation of ground water, tertiary treated water is being used for irrigation/flushing purpose in some of Urban Estates of HSVP. Efforts are being made for its implementation in other Urban Estates also.

19. Estimation of sewage in towns encasement of river Ghaggar.

The estimation for generation of sewage for population upto year 2040 and the gap in treatment capacity is given in the table.

S.No.	Name of Town	Total Population (As per Census 2011)	Projected Population for the year 2040	Treatment Capacity (MLD)				Treatment Capacity required upto 2040 MLD	Gap in treatment upto 2040 MLD
				Existing	Under Construction	In planning stage	Total		
1	Naraingarh	22832	32764	3	0	1	4	3.5	-
2	Ambala	300127	430683	39	24	15	78	46.5	-
3	Barara	21545	30917	0	4	0	4	3.3	-
4	Ratia	37152	53313	6.5	5	0	11.5	5.8	-
5	Tohana	63871	91655	10	0	0	10	9.9	-
6	Jhokal Mandi	7788	11176	0	3	0	3	1.2	-
7	Fatehabad	70777	101565	20	0	0	20	11	-
8	Bhuna	30094	43185	0	8	0	8	4.7	-
9	Barwala	43384	62256	6	0	0	6	6.7	0.7
10	Hisar	307024	440579	70	4	15	89	47.6	-
11	Uklana Mandi	13219	18969	6.5	0	0	6.5	2	-
12	Narnaund	17242	24742	4	0	0	4	2.7	-
13	Hansi	86770	124515	12.5	6.5	5	24	13.4	-
14	Narwana	62090	89099	9.25	0	0	9.25	9.6	0.35
15	Uchana	16815	24130	3.5	0	0	3.5	2.6	-
16	Jind	167592	240495	30	7	0	37	26	-
17	Julana	18755	26913	4	0	0	4	2.9	-
18	Safidon	34728	49835	9	0	0	9	5.4	-
19	Cheeka	38952	55896	10	0	0	10	6	-
20	Kaithal	144915	207953	37.5	0	0	37.5	22.5	-
21	Kalayat	18660	26777	5	0	0	5	2.9	-
22	Pundri	33484	48050	3.5	0	0	3.5	5.2	1.7
23	Rajaund	17434	25018	0	0	5	5	2.7	-
24	Shahbad	42607	61141	11.5	0	0	11.5	6.6	-
25	Pehowa	38853	55754	8	0	0	8	6	-
26	Thanesar	155152	222643	0	25	0	25	24	-
27	Kalka	34134	48982	4.75	0	0	4.75	5.3	0.55
28	Pinjore	35912	51534	5	0	8	13	5.6	-
29	Mandi Dabwali	52873	75873	16.5	0	0	16.5	8.2	-
30	Kalanwali	22095	31706	9.5	0	0	9.5	3.4	-

S.No.	Name of Town	Total Population (As per Census 2011)	Projected Population for the year 2040	Treatment Capacity (MLD)				Treatment Capacity required upto 2040 MLD	Gap in treatment upto 2040 MLD
				Existing	Under Construction	In planning stage	Total		
31	Sirsa	182534	261936	25	20	7.5	52.5	28.3	-
32	Rania	25123	36052	6	0	0	6	3.9	-
33	Ellenabad	36623	52554	7.5	0	0	7.5	5.7	-
34	Panchkula	211355	303294	72	0	0	72	32.8	
	Total	2412511	3461954	455	106.5	56.5	618	373.9	3.3

20. Open defecation in Districts.

Haryana (Urban) has been declared ODF first time on 2nd October, 2017 by the Ministry of Housing and Urban Affairs under Swachh Bharat Mission (Urban). Later on all the Urban Local Bodies except Faridabad, 2nd time also declared Open Defecation Free by the process of independent evaluation through the agency appointed by MoHUA. To evaluate the sustainability of ODF, Ministry has been started recertification process of all ULBs as per the protocols of ODF third times and in this process 28 ULBs already recertified ODF out of 80.

To achieve this status Department of Urban Local Bodies has been taken various steps such as motivate community for construction of Individual House Hold Latrines (IHHL), Construction and renovation of Community Toilets and Public Toilets seats. Till date 61412 IHHL have been constructed by the individuals and Government of Haryana released Rs. 14000 to each individuals household for construction of toilets as subsidy (Rs. 4000/- from Central Government and Rs. 10000/- from State Government). Directorate of Urban Local Bodies has fixed the target of 65000 IHHL which are to be completed by September, 2019. Similarly, to stop open defecation, DULB also took initiatives for construction and renovation of Community Toilets and Public Toilets seats for providing the toilets facilities for community which have not their own toilets. Total 10122 (97%) community and Public toilets seats have been constructed against the target of 10394 seats, whereas more than 200 seats of community and public toilets are under construction. Department has been fixed its target to construct all CT/PT before 30th September, 2019.

Action Plan to Complete the 100% Target of Construction of Individual House Hold Latrines (IHHL) Community Toilets (CT/ Public Toilets (PTs) Seats

Target	IHHL	CT-PT Seats
		65000
Target Achieved as on December, 2018	61412	10122
Target to be Achieved	3588	272
Jan-19	100	10
Feb-19	150	20

Mar-19	250	25
Apr-19	350	30
May-19	400	35
Jun-19	500	40
Jul-19	550	35
Aug-19	600	35
Sep-19	700	45
Total	3600	275

21. Disposal by sewages through tankers by private parties.

The decentralized STPs planned along the drains shall also be planned for receiving untreated sewage by tankers for treatment. The practice of disposing sewage in drains through the tanker is going on in many town/cities. Municipal Corporation Gurugram has finalized the rate contract for disposal of sewage through Suction Tanker. Under this Septage Management Plan, the sewage of unauthorised colonies and septic tanks shall be listed through Suction taken and disposed-off at 35 No. identified locations of STP/MPS. This will be monitored by online monitoring system through QR code.

The above plan shall be implemented for all the towns in Haryana.

22. Involvement of Civil Society/Creation of awareness

For involving the general public and other stakeholders, it has been decided to create a website by HSPCB giving a provision for inviting suggestions, comments and feedback. A redressal system will also be provided through concerned Departments and action taken on the suggestions/complaints in the portal. It has also been planned to involve eco-clubs through the Education Department. HSPCB will be issuing advertisements on such sensitive issues periodically. Besides, the SESTF, constituted at District level will also actively involve public participation and in redressal of issues relating to pollution and cleaning of the rivers/drains.

23. Organizing of Health Camps.

Health Department has been directed to organize health camps in areas prone to water pollution and to get profile studies conducted on specific diseases observed in the locality, through reputed institutions. The Health Department informed that it had issued directions on 22.11.2018 all the District Level Officers to organize health camps. Health Department shall review the status and progress in the case in its monthly meeting.

Concluding Remarks

The above action plan has been prepared on specific action points after consulting all the stakeholder Departments of Haryana and they have also provided a specific time frame for every activity to bring down the pollution contributing to river Yamuna. This will be reviewed by the Departments concerned, at their level, in every monthly meeting. Further, the progress of all the actions shall be reviewed by Administrative Secretary of Environment Department every month with the Secretaries

/ senior officers of all stakeholder Departments, where the progress vis-a-vis timelines will be reviewed. It has also been decided that a Quarterly Review meeting will be done at the level of Chief Secretary with the Administrative Secretaries concerned and the progress will be reported after every Quarterly Review Meeting, to the Monitoring Committee appointed by NGT and the status will be reported to NGT as well.