

7.1.9 Jind

The district lies in the north- central part of Haryana between 29°03' and 29° 51' north latitudes and 75°53' and 76°47' east longitudes. The district covers a total area of 2702 sq. km. The climate of this district is on the whole dry, hot in summer and cold in winter. The average rainfall in the district is 599 mm. Over 70% of the annual rainfall is received during the monsoon months of July to September. A little rainfall is also received during the winter months (December to February) in association with western disturbances, which pass through the district or in the vicinage from west to east, affecting the weather in this season. The temperature in the district starts increasing from the beginning of March till June, which is generally the hottest month. The mean daily maximum temperature during the hot season render the weather very tiring. After October, both day and night temperature decreases rapidly. January is usually the coldest month with the mean daily maximum temperature at about 21°C.

Physiographical, it constitutes a part of the alluvial plain, which is largely flat, featureless and is formed due to Pleistocene and sub-recent alluvial deposits of the Indo-Gangetic system.

							Area in ha
						Open	Water
Sr. No.	Wettcode	Wetland Category	Number of Wetlands	Total Wetland Area	% of wetland area	Post- monsoon Area	Pre- monsoon Area
	1100	Inland Wetlands - Natural					
1	1101	Lakes/Ponds	-	-	-	-	-
2	1102	Ox-bow lakes/ Cut-off meanders	-	-	-	-	-
3	1103	High altitude wetlands	-	-	-	-	-
4	1104	Riverine wetlands	-	-	-	-	-
5	1105	Waterlogged	5	61	2.83	61	60
6	1106	River/Stream	-	-	-	-	-
	1200	Inland Wetlands -Man-made					
7	1201	Reservoirs/Barrages	-	-	-	-	-
8	1202	Tanks/Ponds	160	1033	47.98	967	929
9	1203	Waterlogged	9	106	4.92	94	81
10	1204	Salt pans	-	-	-	-	-
		Sub-Total	174	1200	55.74	1122	1070
		Wetlands (<2.25 ha), mainly Tanks	953	953	44.26	-	-
		Total	1127	2153	100.00	1122	1070

Table 14: Area estimates of wetlands in Jind

Area under Aquatic Vegetation	69	92
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Area under turbidity levels		
Low	963	926
Moderate	4	4
High	155	140

The total wetland area in the district is 2153 ha and tanks/ponds contribute 48 per cent water spread area in post and pre-monsoon season. There are no major rivers in the district. In all there are only 174 wetlands having area more than 2.25 ha in the district where as less than 2.25 ha wetlands are 953. Qualitative turbidity is mostly low in both the season. Out of 2153 ha 69 ha and 92 ha area is infested by aquatic vegetation in post-monsoon season whereas in pre-monsoon season respectively.



		even preside			1.000.010.1
0				Coastal Wetlands	
			Natural		
Data S] [Lagoons			2101
IRS P6		Creeks			2102
Prepar		Sand/Beach			2103
. Tepar	7	Intertidal mud flats	1		2104
	7	Salt marsh	1		2105
	7	Mangroves			2106
	7	Coral reefs	1		2107
Spons			Man-made		
	7	Salt pans			2201
	7	Aquaculture ponds	1		2202





7.1.9 Fatehabad

Fatehabad district, situated in western part of Haryana, has an area of 2520 sq. km. Geographically it falls between 29°15' to 29°49' North latitude and 75°13' to 75°58' East longitude. The climate of the Fatehabad district is characterized by its dryness and extreme temperature variations and scanty rainfall. There is a rapid increase in temperature after February. The mean daily maximum temperature is 41.6°C in June, which is the hottest month. Sometimes, during the drought period the maximum temperature of the district may rise up to 47 to 48°C in summer. The major part of the rainfall occurs during the monsoons. The latter half of September and October constitutes the post monsoon period. The average annual rainfall ranges between 323.5 to 497.5 mm. About 71 per cent of annual normal rainfall is received during the short southwestern monsoon period.

The district is the part of the Ghaggar alluvial plain and its southern and western portion mark a gradual transition to the Thar Desert. The soils of the district change generally from sand to clay.

						I	Area in ha
				— , .		Open	Water
Sr. No.	Wettcode	Wetland Category	Number of Wetlands	l otal Wetland Area	% of wetland area	Post- monsoon Area	Pre- monsoon Area
	1100	Inland Wetlands - Natural					
1	1101	Lakes/Ponds	-	-	-	-	-
2	1102	Ox-bow lakes/ Cut-off meanders	-	-	-	-	-
3	1103	High altitude wetlands	-	-	-	-	-
4	1104	Riverine wetlands	-	-	-	-	-
5	1105	Waterlogged	2	29	1.88	29	13
6	1106	River/Stream	1	602	39.12	602	461
	1200	Inland Wetlands -Man-made					
7	1201	Reservoirs/Barrages	-	-	-	-	-
8	1202	Tanks/Ponds	47	332	21.57	200	208
9	1203	Waterlogged	9	105	6.82	17	59
10	1204	Salt pans	-	-	-	-	-
		Sub-Total	59	1068	69.40	848	741
		Wetlands (<2.25 ha), mainly Tanks	471	471	30.60	-	-
		Total	530	1539	100.00	848	741

Table 15: Area e	estimates o	of wetlands	in	Fatehabad
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Area under Aquatic Vegetation

106

139

Area under turbidity levels		
Low	199	207
Moderate	604	462
High	45	72

The total wetland area in the district is 1539 ha and tanks/ponds and river/streams contribute 60 per cent wetland area in post-monsoon and pre-monsoon season. There is a single river, which has an area of 602 ha. In all there are only 59 wetlands having area more than 2.25 ha in the district where as less than 2.25ha wetlands are 471. Qualitative turbidity ranges from moderate to low in both the season. Out of 1539 wetland area 139 ha and 106 ha wetland is under aquatic vegetation during post-monsoon and pre-monsoon season respectively.



			The second second second
	Coastal Wetlands		
		Natural	
2101			Lagoons
2102			Creeks
2103			Sand/Beach
2104			Intertidal mud flats
2105			Salt marsh
2106			Mangroves
2107			Coral reefs
		Man-made	
2201			Salt pans
2202		İ	Aquaculture ponds





7.1.10 Sirsa

The Sirsa district lies in the extreme west corner of Haryana State. It touches the interstate boundaries on three sides and is connected with its own state only on the eastern side. The district is stretched between 29°14' to 30°N latitudes and 74°29' to 75°18'E longitudes covering an area of 4277 Sq. Kms. Its ancient name was Sairishaka and from that it seems to have been changed to Sirsa. According to a local tradition, an unknown king named Saras founded the town in 7th century A.D. and on his name the town was called Sirsa. According to another tradition, the name has its origin from the 'sacred river Saraswati which once flowed near it. During medieval period, the town was known as Sarsuti. The derivation of the name Sirsa is also attributed to the abundance of siris trees. In ancient period, Sirsa was also known as Sirsa pattan. The climate of this district is characterized by its dryness and extreme temperature and scanty rainfall. It can be defined as subtropical, semi-arid, continental and monsoon type. The average annual rainfall ranged between 260.3, 275.8 mm. Physiographically the Sirsa district consists of alluvial and sandy aeolian plain.

						Are	ea in ha
						Open	Water
Sr. No.	Wettcode	Wetland Category	Number of Wetlands	Total Wetland Area	% of wetland area	Post- monsoon Area	Pre- monsoon Area
	1100	Inland Wetlands - Natural					
1	1101	Lakes/Ponds	-	-	-	-	-
2	1102	Ox-bow lakes/ Cut-off meanders	-	-	-	-	-
3	1103	High altitude wetlands	-	-	-	-	-
4	1104	Riverine wetlands	-	-	-	-	-
5	1105	Waterlogged	1	98	5.52	98	98
6	1106	River/Stream	-	-	-	-	-
	1200	Inland Wetlands -Man-made					
7	1201	Reservoirs/Barrages	1	12	0.68	12	0
8	1202	Tanks/Ponds	57	305	17.17	259	237
9	1203	Waterlogged	5	319	17.96	266	110
10	1204	Salt pans	-	-	-	-	-
		Sub-Total	64	734	41.33	635	445
		Wetlands (<2.25 ha), mainly Tanks	1042	1042	58.67	-	-
		Total	1106	1776	100.00	635	445

Table 16: Area estimates of wetlands in Sirsa

Area under Aquatic Vegetation	Area under Aquatic Vegetatio
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147

48

Area under turbidity levels		
Low	259	238
Moderate	12	0
High	364	207

The total wetland area in the district is 1776 ha and Tanks/Ponds and man-made waterlogged contribute 35 per cent of total wetland area. In all there are only 64 wetlands having area more than 2.25 ha in the district where as less than 2.25 ha wetlands are 1042. Qualitative turbidity ranges from low to high. High and low turbidity is observed in both seasons. Out of 1776 ha 48 ha and 147 ha area was covered by aquatic vegetation.



	Coastal Wetlands			
		Natural		
2101			Lagoons	
2102			Creeks	
2103			Sand/Beach	
2104			Intertidal mud flats	
2105			Salt marsh	
2106			Mangroves	
2107			Coral reefs	
		Man-made		
2201			Salt pans	
2202			Aquaculture ponds	





7.1.11 Hisar

The Hisar district, a part of the Indo-Gangetic alluvial plain is situated between 28°53'45" to 29°49'15" N latitudes and 75°13'15" to 76°18'15" E longitudes. It has an area of 3983 sq.km. The Hisar district experiences a sub-tropical climate. The climate is influenced by westerly winds in summer months raising temperature as high as 47 °C, whereas; in winter north-westerly cold winds provide low temperature touching even -1.70 °C. The average rainfall in the district during the period of 1999 to 2004 is 361.20 mm. About 85 per cent of annual rainfall is received during the short south- western monsoon period. May and June are the hottest months. December and January are generally the coldest months. The lowest temperature -1.70 °C was recorded on January 15, 2003 and highest 47°C was recorded on May 12, 2001.

The area is nearly level, with imperceptible slopes, except for the regions in and around the sand dunes or tibbas. The general gradient of the terrain is from northeast to southwest and then west. Hisar district comprises of three major physiographic units i.e. Aeolian plain, older alluvial plain and Chautang flood plain. The soils of the districts are conventionally referred to as alluvial and aeolian.

					o	Open Water			
Sr. No.	Wettcode	Wetland Category	Number of Wetlands	Total Wetland Area	% of wetland area	Post- monsoon Area	Pre- monsoon Area		
	1100	Inland Wetlands - Natural							
1	1101	Lakes/Ponds	-	-	-	-	-		
2	1102	Ox-bow lakes/ Cut-off meanders	-	-	-	-	-		
3	1103	High altitude wetlands	-	-	-	-	-		
4	1104	Riverine wetlands	-	-	-	-	-		
5	1105	Waterlogged	3	18	0.64	18	18		
6	1106	River/Stream	-	-	-	-	-		
	1200	Inland Wetlands -Man-made							
7	1201	Reservoirs/Barrages	-	-	-	-	-		
8	1202	Tanks/Ponds	152	1308	46.53	1161	1135		
9	1203	Waterlogged	31	375	13.34	355	249		
10	1204	Salt pans	-	-	-	-	-		
		Sub-Total	186	1701	60.51	1534	1402		
		Wetlands (<2.25 ha), mainly Tanks	1110	1110	39.49	-	-		
		Total	1296	2811	100.00	1534	1402		

Table 17: Area estimates of wetlands in Hisar

Area in ha

129

372

106

267

Area under turbidity levels		
Low	1162	1135
Moderate	0	0

The total wetland area in the district is 2811 ha and tanks/ponds and waterlogged contribute 59 per cent wetland area. Wetland area of tanks/ponds in both the season not showed any drastic variation in water spread. In all there are only 186 wetlands having area more than 2.25 ha in the district where as less than 2.25 ha wetlands are 1110. Qualitative turbidity ranges from low to high. High and low turbidity is observed in both seasons. Out of 2811 ha wetland area 129 ha and 106 ha area was covered by aquatic vegetation during post and pre-monsoon season respectively.

Area under Aquatic Vegetation

High



			The second second second
	Coastal Wetlands		
		Natural	
2101			Lagoons
2102			Creeks
2103	2		Sand/Beach
2104			Intertidal mud flats
2105			Salt marsh
2106			Mangroves
2107			Coral reefs
		Man-made	
2201			Salt pans
2202		İ	Aquaculture ponds





District : Hisar

7.1.12 Bhiwani

The Bhiwani district occupies a traditional position between the fairly flat and featureless Punjab, Haryana plains and the Rajasthan desert and Aravali hills. It occupies an area of 4,778 sq. km and located between 28°19'N to 29°05' N latitudes and 75°28' to 76°28' E longitudes. The far inland location and bordering with Rajasthan desert in the west have profoundly influenced the climate, which is very hot in summer and cold in a fairly long winter. The average annual rainfall ranges between 315.2 to 410.2 mm (based on averages of 1995-99, 1996-2000 & 1997-01). Winter rains occur during January to march due to western disturbances but the amount is very less. About 75 percent of the annual rainfall is received during the monsoon month.

Temperature starts rising rapidly from March and reaches 41°C till with minimum temperature 28°C. Maximum temperature may occasionally touch 48°C on individual days during the period. Broadly speaking the district is a sandy, undulating plain dotted with sand dunes of varying shapes and dimensions occurring in different directional dispositions.

						Open Water			
Sr. No.	Wettcode	Wetland Category	Number of Wetlands	Total Wetland Area	% of wetland area	Post- monsoon Area	Pre- monsoon Area		
	1100	Inland Wetlands - Natural							
1	1101	Lakes/Ponds	-	-	-	-	-		
2	1102	Ox-bow lakes/ Cut-off meanders	-	-	-	-	-		
3	1103	High altitude wetlands	-	-	-	-	-		
4	1104	Riverine wetlands	-	-	-	-	-		
5	1105	Waterlogged	7	94	5.38	92	59		
6	1106	River/Stream	-	-	-	-	-		
	1200	Inland Wetlands -Man-made							
7	1201	Reservoirs/Barrages	-	-	-	-	-		
8	1202	Tanks/Ponds	72	562	32.15	498	458		
9	1203	Waterlogged	13	210	12.01	179	136		
10	1204	Salt pans	-	-	-	-	-		
		Sub-Total	92	866	49.54	769	653		
		Wetlands (<2.25 ha), mainly Tanks	882	882	50.46	-	-		
		Total	974	1748	100.00	769	653		

Table 18: Area estimates of wetlands in Bhiwan	Table	18: A	rea es	timates	of w	retlands	in	Bhiwan
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Area under Aquatic Vegetation 72

14

Aroa in ha

Area under turbidity levels		
Low	498	458
Moderate	0	0
High	271	195

The total wetland area in the district is 1748 ha and tanks/ponds and waterlogged contribute 44 per cent wetland area. Wetland area of tanks/ponds in both the season not showed any drastic variation in water spread. Natural waterlogged wetlands were observed low-lying areas and contribute around 5 per cent in total wetlands of the district. In all there are only 92 wetlands having area more than 2.25 ha in the district where as less than 2.25 ha wetlands are 882. Qualitative turbidity ranges from low to high and moderate turbidity is observed in both seasons. Out of 1748 ha wetland area 72 ha and 14 ha area was covered by aquatic vegetation during post and pre-monsoon season respectively.



	Coastal Wetlands			
		Natural		
2101			Lagoons	
2102			Creeks	
2103			Sand/Beach	
2104			Intertidal mud flats	
2105			Salt marsh	
2106			Mangroves	
2107			Coral reefs	
		Man-made		
2201			Salt pans	
2202		İ	Aquaculture ponds	

