

GOVERNMENT OF INDIA
MINISTRY OF SHIPPING
LOK SABHA
UNSTARRED QUESTION NO. 441
TO BE ANSWERED ON 19th JULY, 2018

DEVELOPMENT OF WATERWAYS

441. SHRI MANSUKHBHAI DHANJIBHAI VASAVA:
SHRI HARISHCHANDRA CHAVAN:
DR. RAMESH POKHRIYAL "NISHANK":

Will the Minister of SHIPPING be pleased to state:

पोत परिवहन मंत्री

- (a) whether the Government proposes to develop new waterways on rivers and if so, the details thereof, river/ waterways-wise;
- (b) the details of waterways which are operational in the country, river/ waterways-wise;
- (c) the present status of the National Waterways along with their navigability status, waterways-wise;
- (d) whether the Government has established any mechanism for regular monitoring and evaluation of navigability of such waterways and if so, the details thereof; and
- (e) the details of waterways being used regularly for transportation in the country as on date?

ANSWER

MINISTER OF STATE IN THE MINISTRY OF SHIPPING
(SHRI PON. RADHAKRISHNAN)

(a) to (e) To create a country wide waterway network so as to optimize the full potential of this mode of transport, 111 inland waterways (including the existing 5 national waterways) have been declared as National Waterways (NWs) under the 'National Waterways Act, 2016' which has been enforced w.e.f. 12.04.2016. The list of these NWs is at **Annex-I**. Subsequent to the declaration of a National Waterway, feasibility study which inter-alia covers the potential of navigability, cargo availability, cost of development etc. on the NW is undertaken by the Inland Waterways Authority of India (IWAI).

The details of NWs which are operational/ navigable and being used for transportation at present in the country are at **Annex-II**.

As per the feasibility reports completed so far, 36 NWs have been found to be technically viable. Out of these 36 NWs, developmental activities have been initiated on 8 NWs in 2017-18. A list of these 8 NWs is enclosed as **Annex-III**. Status of DPRs for the remaining 28 NWs is at **Annex-IV**.

IWAI has set up a mechanism to monitor the waterway through regular Thalweg surveys and channel inspection. Regular fortnightly hydrographic surveys are conducted to determine the available depth and possible shoal formations in the channel and to notify the obstructions, clearances available at cross structures. A constant vigil is kept on the river behavior and plans accordingly to ensure fairway for safe movement of vessels. Based on the observation during channel inspection, River Notices are being issued and placed on the IWAI website with details on Least Available Depth (LAD), clearances at bridge structures etc. along with any specific information to be conveyed to shippers.

List of 111 National Waterways

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
1	National Waterway 1	1620	Ganga-Bhagirathi-Hooghly River System (Haldia - Allahabad)	Uttar Pradesh, Bihar, Jharkhand & West Bengal
2	National Waterway 2	891	Brahmaputra River (Dhubri - Sadiya)	Assam
3	National Waterway 3	205	West Coast Canal (Kottapuram - Kollam), Champakara and Udyogmandal Canals	Kerala
		170	West Coast Canal (Kottapuram - Kozhikode)	
4	National Waterway 4	50	Kakinada Canal (Kakinada to Rajahmundry)	Andhra Pradesh, Telangana, Chhattisgarh, Karnataka, Tamil Nadu, Pondichery and Maharashtra
		171	Godavari river (Bhadrachalam to Rajahmundry)	
		139	Eluru Canal (Rajahmundry to Vijayawada)	
		157	Krishna river (Wazirabad to Vijayawada)	
		113	Commamur Canal (Vijayawada to Peddaganjam)	
		316	North Buckingham Canal (Peddaganjam to Central Station of Chennai)	
		110	South Buckingham canal (Central Station of Chennai to Marakanam)	
		22	Marakanam to Puducherry through Kaluvelly tank	
		1202	River Godavari (Bhadrachalam - Nashik)	
5	National Waterway 5	256	East Coast Canal and Matai river	Odisha and West Bengal
		265	Brahmani-Kharsua-Dhamra rivers	
		67	Mahanadi delta rivers (Consisting of Hansua river, Nunanala, Gobrinala, Kharnasi river and Mahanadi river)	
6	National Waterway 6	68	AAI RIVER	Assam
7	National Waterway 7	90	AJOY (AJAY) RIVER	West Bengal
8	National Waterway 8	29	ALAPPUZHA-CHANGANASSERY CANAL	Kerala

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
9	National Waterway 9	40	ALAPPUZHA- KOTTAYAM – ATHIRAMPUZHA CANAL	Kerala Alternate route: 11.5km
10	National Waterway 10	45	AMBA RIVER	Maharashtra
11	National Waterway 11	99	ARUNAWATI - ARAN RIVER SYSTEM	Maharashtra
12	National Waterway 12	5.5	ASI RIVER	Uttar Pradesh
13	National Waterway 13	11	AVM CANAL	Kerala & Tamil Nadu
14	National Waterway 14	48	BAITARNI RIVER	Odisha
15	National Waterway 15	135	BAKRESWAR - MAYURAKSHI RIVER SYSTEM	West Bengal
16	National Waterway 16	121	BARAK RIVER	Assam
17	National Waterway 17	189	BEAS RIVER	Himachal Pradesh & Punjab
18	National Waterway 18	69	BEKI RIVER	Assam
19	National Waterway 19	67	BETWA RIVER	Uttar Pradesh
20	National Waterway 20	95	BHAVANI RIVER	Tamil Nadu
21	National Waterway 21	139	BHEEMA RIVER	Karnataka & Telangana
22	National Waterway 22	156	BIRUPA - BADI GENGUTI - BRAHMANI RIVER SYSTEM	Odisha
23	National Waterway 23	56	BUDHA BALANGA	Odisha
24	National Waterway 24	61	CHAMBAL RIVER	Uttar Pradesh
25	National Waterway 25	33	CHAPORA RIVER	Goa
26	National Waterway 26	51	CHENAB RIVER	Jammu & Kashmir
27	National Waterway 27	17	CUMBERJUA RIVER	Goa
28	National Waterway 28	45	DABHOL CREEK - VASHISHTI RIVER SYSTEM	Maharashtra
29	National Waterway 29	132	DAMODAR RIVER	West Bengal
30	National Waterway 30	109	DEHING RIVER	Assam
31	National Waterway 31	114	DHANSIRI / CHATHE	Assam
32	National Waterway 32	63	DIKHU RIVER	Assam
33	National Waterway 33	61	DOYANS RIVER	Assam
34	National Waterway 34	137	DVC CANAL	West Bengal
35	National Waterway 35	108	DWAREKESWAR RIVER	West Bengal
36	National Waterway 36	119	DWARKA RIVER	West Bengal
37	National Waterway 37	296	GANDAK RIVER	Bihar & Uttar Pradesh
38	National Waterway 38	62	GANGADHAR RIVER	Assam & West Bengal
39	National Waterway 39	49	GANOL RIVER	Meghalaya
40	National Waterway 40	354	GHAGHRA RIVER	Bihar & Uttar Pradesh

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
41	National Waterway 41	112	GHATAPRABHA RIVER	Karnataka
42	National Waterway 42	514	GOMTI RIVER	Uttar Pradesh
43	National Waterway 43	10	GURUPUR RIVER	Karnataka
44	National Waterway 44	63	ICHAMATI RIVER	West Bengal
45	National Waterway 45	650	INDIRA GANDHI CANAL	Punjab , Haryana &Rajashtan
46	National Waterway 46	35	INDUS RIVER	Jammu & Kashmir
47	National Waterway 47	131	JALANGI RIVER	West Bengal
48	National Waterway 48	590	JAWAI-LUNI-RANN OF KUTCH RIVER SYSTEM	Gujarat & Rajasthan
49	National Waterway 49	110	JHELUM RIVER	Jammu & Kashmir
50	National Waterway 50	43	JINJIRAM RIVER	Assam & Meghalaya
51	National Waterway 51	23	KABINI RIVER	Karnataka
52	National Waterway 52	53	KALI RIVER	Karnataka
53	National Waterway 53	145	KALYAN-THANE-MUMBAI WATERWAY, VASAI CREEK AND ULHAS RIVER SYSTEM	Maharashtra
54	National Waterway 54	86	KARAMNASA RIVER	Bihar & Uttar Pradesh
55	National Waterway 55	311	KAVERI - KOLLIDAM RIVER SYSTEM	Tamil Nadu
56	National Waterway 56	22	KHERKAI RIVER	Jharkhand
57	National Waterway 57	50	KOPILI RIVER	Assam
58	National Waterway 58	236	KOSI RIVER	Bihar
59	National Waterway 59	19	KOTTAYAM-VAIKOM CANAL	Kerala
60	National Waterway 60	80	KUMARI RIVER	West Bengal
61	National Waterway 61	28	KYN Shi RIVER	Meghalaya
62	National Waterway 62	86	LOHIT RIVER	Assam & Arunachal Pradesh
63	National Waterway 63	336	LUNI RIVER	Rajasthan
64	National Waterway 64	426	MAHANADI RIVER	Odisha
65	National Waterway 65	80	MAHANANDA RIVER	West Bengal
66	National Waterway 66	247	MAHI RIVER	Gujarat
67	National Waterway 67	94	MALAPRABHA RIVER	Karnataka
68	National Waterway 68	41	MANDOVI RIVER	Goa
69	National Waterway 69	5	MANIMUTHARU RIVER	Tamil Nadu
70	National Waterway 70	245	MANJARA RIVER	Maharashtra & Telangana
71	National Waterway 71	27	MAPUSA / MOIDE RIVER	Goa
72	National Waterway 72	59	NAG RIVER	Maharashtra
73	National Waterway 73	226	NARMADA RIVER	Maharashtra & Gujarat
74	National Waterway 74	79	NETRAVATHI RIVER	Karnataka
75	National Waterway 75	142	PALAR RIVER	Tamil Nadu

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
76	National Waterway 76	23	PANCHAGANGAVALI (PANCHAGANGOLI) RIVER	Karnataka
77	National Waterway 77	20	PAZHAR RIVER	Tamil Nadu
78	National Waterway 78	262	PENGANAGA - WARDHA RIVER SYSTEM	Maharashtra & Telangana
79	National Waterway 79	28	PENAR RIVER	Andhra Pradesh
80	National Waterway 80	126	PONNIYAR RIVER	Tamil Nadu
81	National Waterway 81	35	PUNPUN RIVER	Bihar
82	National Waterway 82	58	PUTHIMARI RIVER	Assam
83	National Waterway 83	31	RAJPURI CREEK	Maharashtra
84	National Waterway 84	44	RAVI RIVER	Jammu & Kashmir, Himachal Pradesh & Punjab
85	National Waterway 85	31	REVADANDA CREEK - KUNDALIKA RIVER SYSTEM	Maharashtra
86	National Waterway 86	72	RUPNARAYAN RIVER	West Bengal
87	National Waterway 87	210	SABARMATI RIVER	Gujarat
88	National Waterway 88	14	SAL RIVER	Goa
89	National Waterway 89	45	SAVITRI RIVER (BANKOT CREEK)	Maharashtra
90	National Waterway 90	29	SHARAVATI RIVER	Karnataka
91	National Waterway 91	52	SHASTRI RIVER - JAIGAD CREEK SYSTEM	Maharashtra
92	National Waterway 92	26	SILABATI RIVER	West Bengal
93	National Waterway 93	63	SIMSANG RIVER	Meghalaya
94	National Waterway 94	141	SONE RIVER	Bihar
95	National Waterway 95	106	SUBANSIRI RIVER	Assam
96	National Waterway 96	311	SUBARNREKHA RIVER	Jharkhand, West Bengal & Odisha
97	National Waterway 97	172	SUNDERBANS WATERWAY	West Bengal
		56	BIDYA RIVER	West Bengal
		15	CHHOTA KALAGACHI (CHHOTO KALERGACHI) RIVER	West Bengal
		7	GOMAR RIVER	West Bengal
		16	HARIBHANGA RIVER	West Bengal
		37	HOGLA (HOGAL)-PATHANKHALI RIVER	West Bengal
		9	KALINDI (KALANDI) RIVER	West Bengal
		22	KATAKHALI RIVER	West Bengal
		99	MATLA RIVER	West Bengal
		28	MURI GANGA (BARATALA) RIVER	West Bengal
		53	RAIMANGAL RIVER	West Bengal
		14	SAHIBKHALI (SAHEBKHALI)	West Bengal

Sl. No.	National Waterway No.	Length (km)	Details of Waterways	STATES
			RIVER	
		37	SAPTAMUKHI RIVER	West Bengal
		64	THAKURRAN RIVER	West Bengal
98	National Waterway 98	377	SUTLEJ RIVER	Himachal Pradesh & Punjab
99	National Waterway 99	62	TAMARAPARANI RIVER	Tamil Nadu
100	National Waterway 100	436	TAPI RIVER	Maharashtra & Gujarat
101	National Waterway 101	42	TIZU - ZUNGKI RIVERS	Nagaland
102	National Waterway 102	87	TLWANG (DHALESWARI RIVER)	Assam & Mizoram
103	National Waterway 103	73	TONS RIVER	Uttar Pradesh
104	National Waterway 104	232	TUNGABHADRA RIVER	Karnataka, Telangana & Andhra Pradesh
105	National Waterway 105	15	UDAYAVARA RIVER	Karnataka
106	National Waterway 106	20	UMNGOT (DAWKI) RIVER	Meghalaya
107	National Waterway 107	46	VAIGAI RIVER	Tamil Nadu
108	National Waterway 108	53	VARUNA RIVER	Uttar Pradesh
109	National Waterway 109	166	WAINGANGA - PRANAHITA RIVER SYSTEM	Maharashtra & Telangana
110	National Waterway 110	1080	YAMUNA RIVER	Delhi, Haryana & Uttar Pradesh
111	National Waterway 111	50	ZUARI RIVER	Goa
		20162.5		

National Waterways which are operational/navigable being used for transportation

Sl. No.	National Waterway No.	Length (km)	Location (S)
1.	National Waterway-1: Ganga-Bhagirathi-Hooghly River System (Haldia - Allahabad)	1620	Uttar Pradesh, Bihar, Jharkhand, West Bengal
2.	National Waterway 2:Brahmaputra River (Dhubri - Sadiya)	891	Assam
3.	National Waterway 3:West Coast Canal (Kottapuram - Kollam), Champakara and Udyogmandal Canals	205	Kerala
4.	National Waterway 4 (Phase-I : Vijaywada to Muktyala)	82	Andhra Pradesh
5.	National Waterways in Maharashtra i)National Waterway 10 (AMBA RIVER)	45	Maharashtra
	ii)National Waterway 85 (REVADANDA CREEK - KUNDALIKA RIVER SYSTEM)	31	
6.	National Waterways in Goa	17	Goa
	i) NW-27-Cumberjua – confluence with Zuari to confluence with Mandovi river (17 km)	41	
	ii) NW 68 – Mandovi– Usgaon Bridge to Arabian Sea (41 km) iii) NW 111 – Zuari– Sanvordem Bridge to Marmugao Port (50 km).	50	
7.	NW – 9: Alappuzha – Kottayam – Athirampuzha Canal Boat Jetty, Alappuzha to Athirampuzha (38 km) in Kerala.	38	Kerala
8.	NW-100: TAPI RIVER	173	Gujarat
9.	NW-97: Sunderbans Waterways	201	West Bengal (through Indo-Bangladesh Protocol Route)

LIST OF 8 NWS TAKEN UP FOR DEVELOPMENT IN 2017-18

National Waterway	Status
1. River Barak (NW-16):	Under Phase -1, the stretch between Silchar to Bhanga (71 km) has been taken up for development. Waterway is operational with limited infrastructure facility.
2. River Gandak (NW-37): Bhaisalotan Barrage near TriveniGhat to confluence with Ganga river at Hajipur (296 km)in Bihar and UP.	Development works commenced from Ganga confluence to Bagaha Bridge (250 km approx.) under Phase-1.
<p>National Waterways in Goa</p> <p>3. NW-27-Cumberjua – confluence with Zuari to confluence with Mandovi river (17 km)</p> <p>4. NW 68 – Mandovi– Usgaon Bridge to Arabian Sea (41 km)</p> <p>5. NW 111 – Zuari– Sanvordem Bridge to Marmugao Port (50 km).</p>	Development works for expansion / setting up of floating jetties and upgradation/ installation of navigational aids is underway. NWS of Goa are operational.
6. Alappuzha – Kottayam – Athirampuzha Canal (NW-9) :Boat Jetty, Alappuzha to Athirampuzha (38 km) in Kerala.	Development work in the Alappuzha – Kottayam stretchhas commenced under Phase-1 for cargo movement. Waterway is already operational for ferry services.
7. River Rupnarayan (NW-86): Confluence of Dwarkeshwar and Silai rivers (Pratappur) to confluence with Hooghly river (Geonkhali) (72 km) in West Bengal.	Approximately 34 kms between Geonkhali to Kolaghat stretch has been taken up for development under Phase-I.
8. Sunderbans Waterways (NW-97): Namkhana to AtharaBanki Khal & 13 connected rivers (654 km) in West Bengal.	Phase-I development work of this NW from Namkhana to Athara Banki Khal (172 km)has been taken up. NW is already operational under Indo-Bangladesh Protocol (IBP) route.

Status of Detailed Project Reports (DPRs) of 28 NWs			
Sl. No.	River/Canal (NW)	States	Length (km)
DPRs received			
1	GHAGHRA RIVER (NW-40)	U.P & Bihar	354
2	KOSI RIVER (NW-58)	Bihar	236
3	SUBANSIRI RIVER (NW-95)	Assam	106
4	BAITARNI RIVER (NW-14)	Odisha	48
5	MAHANADI -LUNA RIVER (NW-64)	Odisha	98
6	AMBA RIVER (NW-10)	Maharashtra	45
7	REVADANDA CREEK - KUNDALIKA RIVER (NW-85)	Maharashtra	31
8	MAHI RIVER (NW-66)	Gujarat	247
9	NARMADA RIVER (NW-73)	Gujarat & Maharashtra	226
10	TAPI RIVER (NW-100)	Gujarat	173
11	SUBARNAREKHA RIVER (NW-96)	Odisha	30
12	AJOY (AJAY) RIVER (NW-7)	West Bengal	19
13	ICHAMATI RIVER (NW-44)	West Bengal	63
14	KABINI RIVER (NW-51)	Karnataka	23
15	CHAPORA RIVER (NW-25)	Goa	25
16	DABHOL CREEK - VASHISHTI RIVER (NW-28)	Maharashtra	45
17	MAPUSA - MOIDE RIVER (NW-71)	Goa	27
18	SAVITRI RIVER (BANKOT CREEK) (NW-89)	Maharashtra	45
19	GURUPUR RIVER (NW-43)	Karnataka	10
20	NETRAVATHI RIVER (NW-74)	Karnataka	30
21	KALI RIVER (NW-52)	Karnataka	53
22	SHARAVATI RIVER (NW-90)	Karnataka	29
DPRs under preparation			
23	ALAPPUZHA- CHANGANASSERY CANAL (NW-8)	Kerala	29
24	KOTTAYAM-VAIKOM CANAL (NW-59)	Kerala	19
25	Kalyan-Thane-Mumbai Waterway, Vasai Creek and Ulhas river (NW- 53)	Maharashtra	145
26	Tizu and Zungki rivers (NW-101)	Nagaland	42
27	Yamuna (NW-110)	Delhi, Haryana and Uttar Pradesh	1089
28	Jhelum (NW-49)	Jammu & Kashmir	110