



WATER CORPORATION OF ODISHA
Office of The Managing Director, WATCO
Ground Floor, Unnati Bhawan
Near Satyanagar Fly over, Bhubaneswar-751001,
Odisha, India
Telefax: +91-674-2391444
E Mail: mail@watcoodisha.in, md@watcoodisha.in

REQUEST FOR PROPOSAL (RFP)

FOR

Empanelment of Consultancy firms for development of GIS based Asset Mapping and Management System for the Water Supply and Sewerage Infrastructures and Consumer Information in different ULBs of Odisha

[RFP Identification No.01-2020/21, Dt.05-05-2020]

May 2020

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Disclaimer

This Request for Proposal (RFP) document has been prepared by Managing Director WATCO, Odisha, Bhubaneswar solely for the purpose of empaneling/shortlisting suitable and eligible Agencies/Firms for Development of GIS based Asset Mapping and Management System for the Water Supply and Sewerage infrastructures and Consumer Information in different ULBs of Odisha.

The information contained in this RFP document (the “**RFP**”) or subsequently provided to Firms/Agencies, whether verbally or in documentary or any other form by or on behalf of WATCO or any of their employees or advisors, is provided to Firms/Agencies on the terms and conditions set out in this RFP and such other terms and conditions subject to which such information is provided.

This RFP is neither a bid nor an agreement and is neither an offer nor invitation by “**WATCO**” to the Firms/Agencies. The purpose of this RFP is to provide interested Firms/Agencies with information that may be useful to them for submitting required documents as per this RFP for qualifying in the empanelment/shortlisting process.

The issue of this RFP does not imply that “**WATCO**” is bound to select any firm for assigning any work. The Firms/Agencies shall bear all its costs associated with or relating to the preparation and submission of its RFP including but not limited to preparation, copying, postage, delivery fees, expenses associated with any demonstrations or presentations which may be required by “**WATCO**” or any other costs incurred in connection with or relating to its RFP. All such costs and expenses will remain with the Firms/Agencies and “**WATCO**” shall not be liable in any manner whatsoever for the same or for any other costs or other expenses incurred by a Firms/Agencies in preparation or submission of the RFP.



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RFP Identification No MD, WATCO-01-2020/21, Dated:05-05-2020

REQUEST FOR PROPOSAL (RFP)

The MANAGING Director, WATCO, Bhubaneswar on behalf of the Governor of Odisha invites Request For Proposal (RFP) in conformity with the detailed RFP document, from reputed, experienced, expert and eligible Firms/Agencies capable of preparing GIS based mapping of water supply and sewerage assets including consumer information system in different ULBs of the State of Odisha in order to empanel suitable Firms/Agencies for issue of Financial Proposal document to the empaneled/shortlisted firms/agencies at a subsequent date. Interested parties, may download the RFP document from WATCO website www.watcoodisha.in and completed document can be sent by E-mail/hard copy as per details provided in the RFP document. Processing fee of Rs.5000/- (Rupees Five Thousand only) shall be deposited as provided in the RFP document.

Last date & time for RFP download : 20.05.2020 up to 5.00PM

Last date and time for submission of RFP document : 27.05.2020 up to 5.00PM

Date of Pre bid conference : will be intimated to the eligible firms/agencies after 27.05.2020.

Name & Address of the Officer Inviting RFP:

Managing Director, WATCO,
Office of The Managing Director, WATCO
Ground Floor, Unnati Bhawan
Near Satyanagar Fly Over Bridge, Bhubaneswar-751001,
Odisha, India Telefax: +91-674-2391444,
E Mail: mail@watcoodisha.in, md@watcoodisha.in

Managing Director, WATCO

REQUEST FOR PROPOSAL (RFP)

Empanelment of Consultancy Firms for development of GIS based Asset Mapping and Management System for the Water Supply and Sewerage infrastructures and Consumer Information in different ULBs of Odisha

A. Background:

WATCO is currently providing water supply and sewerage services in Bhubaneswar city, Khordha and Jatni towns with proposal to expand to Cuttack city and Puri town in near future, progressively expanding to provide services in the balance 109 ULBS, presently served by PHEO. There is a proposal for development of GIS based Asset Mapping and Management System for the Water Supply and Sewerage infrastructures and Consumer Information in different ULBs of Odisha(except Bhubaneswar and Cuttack city) with a view to develop a structured, centralized web enabled GIS based urban water supply and sewerage asset management system which will enable WATCO/PHEO to track the assets, do asset planning, rehabilitation and expansion programmes, integrate computerised maintenance management system and several other systems such as project management system, Customer Information System, SCADA etc. to maximize the efficiency and functionality of the platform including real time monitoring of the operations of the water supply and sewerage systems with provision for Analysis and reporting. Asset mapping and consumer management system has been already developed for Bhubaneswar and Cuttack city which is undergoing upgradation. The salient details of the water supply systems are attached at Annexure-I. Bhubaneswar, Cuttack and Puri towns have sewerage systems whereas sewerage systems are under development in Rourkela and Sambalpur towns.

This RFP is issued for empanelment of suitable Firms/Agencies capable of preparing and developing GIS based asset and consumer Mapping cum management system for the Water Supply and Sewerage systems in different ULBs of Odisha.

The shortlisted firms /agencies under this RFP will be issued Financial Proposal document containing detailed scope of work, financial proposal forms and other information to submit their offer at a subsequent stage.

B. Objectives

The key **objectives** of the GIS mapping exercise would be:

- i. Development of GIS based Urban water supply and sewerage system Asset Registry System through mapping of the Assets in the ULBs.
- ii. Development of GIS based consumer Registry System through mapping of the consumers in the ULBs.
- iii. Development of Comprehensive Urban water supply and sewerage system Asset and consumer Geo-database for the ULBs with objectives of efficient data storage, retrieval, map-based information generation.
- iv. Development of a Web based GIS enabled Urban Water Supply and Sewerage System Asset Management System to facilitate recording of information on urban water supply and sewerage assets and processing of asset database for generation of meaningful geo-spatial information through query and visual analytics to aid in Management Information System and Decision Support.
- v. Provision for futuristic integration of computerised Maintenance Management System, Enterprise based asset management system, customer information system, SCADA, real time network modelling and simulation, and social media etc. and for ultimate integration

to the Centralized Command Control Centre for real time control and monitoring, dashboard analysis, data analytics, decision making and support.

C. Broad Scope of Work

The Area of Interest (Aoi) for each town/ULB is the present administrative area of the ULB. Salient details of existing water supply infrastructure are provided in Annexure-I. Further details will be shared during RFP stage.

Urban water supply and sewerage infrastructure asset coverage for GIS mapping: The indicative scope of work for GIS mapping of assets would cover following broad categories of assets (including but not limited to):

- i. **Surface Assets:** Municipal boundaries, AOI boundaries, Ward boundary, Slum boundaries, all categories of roads, bridges, culverts, intersections, traffic islands, storm water drains (open, closed) dividers, land mark buildings, over ground water and sewerage infrastructure assets like STPs, WTPs, storage reservoirs, air valves etc.
- ii. **Sub-surface Assets:** Water supply network, sewerage network, manholes, valve chambers, under ground sumps and structures, water source intake wells, tube wells and production wells etc.
- iii. **Consumer Information:** All consumer data base with coordinates and spatial information

Indicative technology and methodology to be adopted would include but not limited to the followings. Use of total station survey would also be considered for inclusion as per necessity to be indicated in Financial Proposal Document.

- i. **Surface Assets** –Image Derived Digital Cadastral Revenue Maps showing existing land use of the area prepared from satellite data and depicted on revenue maps in GIS formats will be required. The bidder will have to add layers to land use and land cover maps of respected towns and undertake the detailed site verification and DGPS/ GPS Survey for updating the maps including the latitude and longitude position with horizontal accuracy of $\leq 1\text{m}$. Asset coding for surface features with symbology to be converted to match the AMRUT guidelines.
- ii. **Sub-surface Assets** – Utilization of existing maps/ knowledge (secondary sources) of underground pipelines and sewerage system for mapping the sub-surface assets using selective trenching, total station survey etc. Geo-tagging of point features related to pipelines and sewerage would be required.
- iii. **Consumer Mapping:** Geo-tagging of consumers to be done including developing and integrating with the GIS based asset mapping and management system.

Asset coding to be done for the Sub-surface Assets will require to be converted with symbology to match the AMRUT GIS based Design and Standards.

D. Pre-bid Query

The firms will have to ensure that their queries for Pre-Bid meeting should reach to WATCO by email to [md@watcoodisha.in] on or before 5:00PM of 20.05.2020. The firms or their authorised representatives may attend the pre-Bid conference to be held in the WATCO conference hall at Unnati Bhawan, Satyanagar, Bhubaneswar the date of which will be intimated by mail accordingly.

The queries should necessarily be submitted in the format as specified below in **Excel (.xls)** format via email.

Name of the Company				
Contact Person's Name			e-Mail ID & Contact No	
SL	Clause No	Page No	Content of RFP requiring Clarification(s)	Clarification Sought

Any requests for clarifications post the indicated date and time shall not be entertained by WATCO. Replies to pre-bid queries shall be sent to the firms by E-mail.

E. Eligibility Criteria

Interested parties /firms shall comply with the minimum eligibility criteria as mentioned below:

- i. Interested party shall be a registered Consultants / Firms should have valid registration under Companies Act / Registered Firm / Proprietorship / Co- operative / Societies Registration Act / state / central Govt. authority in India / any other (please provide a copy of the registration certificate).
- ii. The interested firm shall have been established for at least 5 years from the issues of this notice.
- iii. In the last 5 years, the bidders should have completed at least one similar assignment (GIS based Mapping of Urban Utility Assets, DGPS / GPS Survey), GIS based consumer database and development of web-enabled Asset Management System with contract value equal to or above INR 20 lakh.
- iv. The interested firm shall have an Average Annual Turnover of at least Rs.5.00Crores (Indian Rupees two crores Only) during the last five (5) financial years from GIS related consultancy services with a positive Net-worth.
- v. The interested firm shall have experts complying to the criteria provided in **Table-2 under Clause-J** in subsequent paragraph.
- vi. Any entity which is blacklisted by the Central Government, any State Government, a statutory authority or a public sector undertaking, as the case may be, and associate firms of such entity would not be eligible.

F. Documents to be submitted with the RFP:

Interested parties qualifying as per the eligibility criteria mentioned herein above shall submit following documents as part of their Request for Proposal (RFP) along with **Annexure-A** duly filled in-

- i) Tender Fee as specified in this RFP.
- ii) Copy of documents presenting evidence of incorporation and registration of firm, PAN card, Service Tax No/ GST No, and brief introduction (profile) of firm.
- iii) Document supporting work experience in development of GIS based Mapping of Urban Utility Assets, DGPS / GPS Survey) and GIS based consumer database.

- iv) Chartered Accountant's certificate/supporting evidences specifying firm's annual turnover for last five financial years FY 2015-16, FY 2016-17, FY 2017-18, FY 2018-19, FY 2019-20.
- v) CVs of Project Team (qualifying the eligibility criteria).
- vi) Document presenting the understanding and approach & methodology for carrying out the scope of work of this RFP.
- vii) All formats as per **Appendix-I (A to D)** with supporting documents

G. Submission of RFP

Interested parties/firms qualifying as per the eligibility criteria mentioned hereinabove shall submit Request for Proposal (RFP) along with all formats prescribed under Appendix-1 in a sealed envelope containing the documents as mentioned in this RFP to Managing Director, WATCO as per the timeline mentioned in this RFP.

The RFP with all complete documents and information duly signed in all pages by the authorised signatory of the firm with seal and processing fee shall be submitted through E-mail as well as hard copy by courier/registered post on or before the scheduled date of submission.

The Consultancy Firm shall submit the processing fee amount electronically on or before the last date and time of the bid in Account Number 35406572672 at State Bank of India, HOD Branch, Bhubaneswar (IFSC /RTGS code No SBIN0010249) through the firm's banker. Since the amount is less than Rs. one lac the same may be remitted through NEFT. RFP number shall be inserted before the beneficiary name and date & time of closing of bid should be inserted either before the Firm's address or Firm's name as shown below.

Account No.
Beneficiary Name/in favour of	⟨RFP No.⟩/⟨Item No.⟩ WATCO
Consultancy Firm's name	⟨Date and time of closing⟩ Consultancy Firm's name
Address	⟨Consultancy Firm's address⟩

- i) The firm must send the scanned copy of RTGS/NEFT customer confirmation in place of DD/Pay order along with the RFP document before the date and time of closing of the receipt of the RFP. If processing fee is transferred through online Banking, confirmation receipt indicating transaction number should be mentioned.
- v) Processing fee received without complying with above instructions shall be liable for rejection."

The RFP shall be received on stipulated date & in time. After scrutinizing the same, the RFPs confirming to the aforesaid criteria of processing fee and fulfilling the eligibility requirements shall be treated as 'Responsive' & it shall be communicated to them, about the date of Technical Presentation as mentioned in the RFP. Consultancy Firms qualifying the eligibility requirement receiving intimation shall only attend the technical presentation meeting.

The processing fee above is non-refundable and non-transferable.

RFP shall be submitted both through E-mail-mail@watcoodisha.in, md@watcoodisha.in (soft copy) and hard copy by speed post in the address given below:

To
The Managing Director,
Office of The Managing Director, WATCO
Ground Floor, Unnati Bhawan Near Satyanagar Fly Over Bridge, Bhubaneswar-751001,
Odisha, India, Telefax: +91-674-2391444, E Mail: mail@watcoodisha.in,
md@watcoodisha.in

The outer envelope must be sealed and labeled with:

Title: REQUEST FOR PROPOSAL (RFP) for Empanelment of Consultancy Firms for development of GIS based Asset Mapping and Management System for the Water Supply and Sewerage infrastructures and Consumer Information in different ULBs of Odisha

- a) RFP Number;
- b) Last date of bid submission;
- c) Full address of bid submission authority (recipient authority) with contact no and email on the right;
- d) Full address of the Bidder with contact no and email on the left.

H. RFP Validity Period

The Request for Proposal (RFP) submitted by interested parties shall be valid for 90 days from the RFP Submission Date as mentioned hereinafter.

I. Last Date of Receipt of RFP

The Request For Proposal (RFP) shall be submitted on or before 27.05.2020 upto 5:00 PM to The Managing Director ,WATCO at postal address as mentioned below.

Address:

The Managing Director, WATCO
Ground Floor, Unnati Bhawan
Near Satyanagar Fly Over Bridge, Bhubaneswar-751001,
Odisha, India, Telefax: +91-674-2391444
E Mail: mail@watcoodisha.in, md@watcoodisha.in

J. Evaluation of Offers

Proposals received in response to this invitation would be evaluated as mentioned under-

- i) The proposals received on or before the last date of receipt of RFP as mentioned hereinabove shall only be considered for evaluation.
- ii) The proposals shall be first scrutinized to evaluate whether they meet the eligibility criteria and requirements of the authority as specified in this RFP.
- iii) The eligible proposals shall be then evaluated in terms of their relevant experience and capability to carry out the assignment and deliver desired outcomes, and shall be assigned technical score.
- iv) The offers shall be assigned Technical Score (TS) out of 100 marks as per the marking scheme presented below.

Table-1: Broad Evaluation Parameters with Marking

S. No.	Evaluation Parameter	Marks
1	Past Experience in the last 5 years, the bidders should have completed at least one similar assignment (GIS based Mapping of Urban Utility Assets, DGPS/ GPS Survey and Development of web-enabled Asset Management System) with consulting fee of above INR 20 lakh per assignment.	40
2	Qualification & Experience of the Proposed Team (Please refer the Experts & Inputs table below)	40
3	Proposed Approach & Methodology	20
Total Marks		100

Table-2: Key Positions and Marking Break-up for the qualification and experience of the team:

Sl. No.	Key Position	No. of Persons	Qualification & Total Experience	Relevant Experience	Marks
1	Team Leader	1	Qualification: Masters in Geography / Geo Informatics / Geology / Graduate in Civil /Municipal/ Environmental Engineering Total Experience: Minimum 10years	Minimum 5years of experience in GIS mapping of urban assets with	Total Marks – 10 Qualification and Total & Relevant Experience – 4 Marks Relevant Work Experience– 6 Marks
2	Team Member - Urban Planner	1	Qualification: Masters/ PG Diploma in Urban Planning Total Experience: Minimum 7 years	Minimum 5 years' experience in Urban Planning with GIS expertise - Preparation of Base Maps, Master Plans, Area Plans, Urban Town Planning Schemes	Total Marks - 8 Qualification and Total Experience – 4 Marks Relevant Experience – 4 Marks
3	Team Member - Civil	1	Qualification: Graduate Civil Engineering	Minimum 5 years' experience in design / construction /	Total Marks - 6 Qualification and

Sl. No.	Key Position	No. of Persons	Qualification & Total Experience	Relevant Experience	Marks
	Engineer		Total Experience: Minimum 7 years	maintenance of urban assets	Total & Minimum Experience – 2 Marks Relevant Work Experience– 4 Marks
4	Team Member - GIS Remote Sensing	3	Qualification: Graduate with 5 years of similar experience	Minimum 5 years' experience in managing or developing databases including data collection, entry and maintenance, database reports and specialized queries is essential. Strong practical experience in using Digital Image Processing and GIS software tools is essential, for example: ESRI products such as Arc View, ArcGIS, ERDAS Imagine and Programming in GIS application development in desktop/ web environment.	Total marks - 12 Marks per person - 4 Qualification and Total & Minimum Experience – 1 Marks Relevant Work Experience– 3 Marks
5	Team Member - IT	1	Qualification: BE Computer Science/IT or MCA Total Experience: Minimum 5years	Minimum 3 years' experience in geospatial data analysis and MIS software/application development for GIS mapping of assets.	Total Marks - 4 Qualification and Total & Minimum Experience – 1 Marks Relevant Work Experience– 3 Marks

- v) WATCO intends to shortlist offers that secure Technical Score (TS) of minimum 70 marks out of the 100 marks. The short-listed FIRMS shall be empaneled for a period of four years for consideration for executing above assignments.
- vi) The empaneled Firms shall only be issued Financial Proposal submission documents containing detailed scope of work and other terms and conditions by WATCO.

K. Rights of Authority

- i) Authority reserves following rights without any kind of liability:
 - a) To accept or reject any or part of any RFP/ entire RFP or all the RFPs without assigning any reason thereof.
 - b) Not to proceed ahead in the RFP process at any stage without assigning any reason thereof.
- ii) The Authority may, at any time prior to the Proposal Due Date, for any reason whether at its own initiative or in response to the clarifications requested by a Bidder, modify the RFP document by issuing an Addendum/Amendment and posting it on its Website, and which shall be binding to all Bidders.
- iii) The Authority retains the right to ask for any further information, document or clarification that may be required from the Proposer for evaluation purposes. The Authority shall exclude the offer from evaluation process in case the requested documents are not submitted by the Proposer within the time specified by the Authority or the Authority find the documents submitted by the Proposer are not satisfactory.
- iv) Misleading or wrong representation in the forms, statements, and attachments submitted as part of the Proposal in response to this RFP. This shall lead to rejection of offer.
- v) Any effort to influence or intervene processing of Bids or empanelment decision by Authority, or any officer, agent or advisor thereof may lead to rejection of proposal.
- vi) Notwithstanding anything contained in this RFP, the Authority reserves the right to accept or reject any Proposal and to annul or revise the Selection Process and reject all Proposals, at any time without any liability or any obligation for such acceptance, rejection, annulment or revision, and without assigning any reasons thereof.

L. Communication to empaneled agency

WATCO will communicate to the empaneled farms or vendors through Email.

Managing Director
WATCO, Odisha, Bhubaneswar

ANNEXURE—A

FORM FOR SUBMISSION OF PROPOSAL-----

From: [Name of Consultant Date
Complete Address of Communication] Place

To

**The Managing Director, WATCO
Ground Floor, Unnati Bhawan
Near Satyanagar Fly Over Bridge, Bhubaneswar-751001,
Odisha, India, Telefax: +91-674-2391444
E Mail: mail@watcoodisha.in, md@watcoodisha.in**

Sub: Request for Proposal (RFP) for Empanelment of Consultancy Firms for Development of GIS based Asset Mapping and Management System for the Water Supply and Sewerage infrastructures and Consumer Information in different ULBs of Odisha

Sir,

We, the undersigned, offer to participate in the empanelment /shortlisting process in accordance with your Request for Proposal (RFP) dated We are hereby submitting our Proposal with all required documents including the processing fee in original sealed in an envelope and also transmitting the soft copy through E-mail.

We have examined the information provided in your RFP and submitting our proposal accordingly. This proposal is valid for acceptance for 90 days from the last date of submission and we confirm that this proposal will remain binding upon us and may be accepted by you at any time before this expiry date for empanelment. The empanelment shall be valid for four year from the date of acceptance.

We note and accept that WATCO may be inviting Financial Proposal from the empanelled agencies for Submitting their offer.

We hereby declare that all the information and statements made in this Proposal are true and accept that any misinterpretation contained in it may lead to our disqualification.

We confirm that we have the authority of **(Name of the agency/institution)** to submit proposals/tenders and to clarify any details on its behalf.

We understand you are not bound to accept any proposal you receive.

Enclosures:

Name of Firm:
Address:

Yours sincerely,
Signature [In full and initials]: Name and Title of Signatory:

APPENDIX – 1

FORMAT FOR SUBMISSION OF PROPOSAL

A. General Details:

SN	Name of the organization / Firm/ Institute	
1.	Permanent address Tel: Fax: Email id:	
2.	Name of the Authorized person for submitting proposal: Mobile No.: Email id: <i>(Attach Authorization letter of Competent Authority)</i>	
3.	Demand draft Details Tender fee Amount: DD No.: Issuing Date: Name of the Bank:	
4.	Registration No., date of Firm and Type of Firm (Certificate to be Enclosed), MOA and GSTN certificates	
5.	Years of Experience in preparing Master plan / Development plans	
6.	Whether the agency was ever blacklisted: Y/N if yes whether that blacklisting was not cancelled: Y/N <i>(If yes, attach copy of same and the affidavit)</i>	
7.	Brief professional background of the organization	<i>(Attached certificate of incorporation, article / memorandum of association, if applicable).</i>
8.	Confirm to accept all term & conditions specified in RFP documents	YES

B. Financial Details:

The firm shall have an Average Annual Turnover of at least Rs.3.00 Crores (Indian Rupees Three Crores Only) during the last five (5) financial years from GIS related consultancy services with a positive Net-worth.

SN.	Year	Consultancy Turnover	Net Worth
1	2015-16		
2	2016-17		
3	2017-18		
4	2018-19		
5	2019-2020		
	Avg for 5 years		

(Certificate from Chartered Accountant for the consultancy turn over and Net worth to be enclosed along with the copies of audited balance sheets including profit and loss statement).

C. Eligibility Criteria Details:

1. In the last 5 years, the bidders should have completed at least one similar assignment (GIS based Mapping of Urban Utility Assets, DGPS / GPS Survey), GIS based consumer database and development of web-enabled Asset Management System with contract value equal to or above INR 20 lakh.

GIS based mapping of urban utility assets including DGPS/ GPS survey:

S. No.	Client and Address	Project Details	Duration of the Project in years (Start & End date)	Value of the Consultancy (Fee in INR)	Status of Implementation (Contract copy enclosed at page no. xx)
1					
2					
.					
,					
.					
n					

2. Qualification & Experience of the Proposed Team

Sl. No.	Key Position	Qualification & Total Experience	Relevant Experience in Years	Details of Relevant experience	Remarks (CV to be attached) (Number of similar projects)
1					
2					
3					
4					
5					
6					
7					

D. Methodology including Management Plan

A detailed write-up under the following heads to be submitted along with this offer.

Approach and Methodology for development of GIS based asset mapping and management system with futuristic use to meet the objectives enumerated at **clause "B"** under objectives of the RFP.

Authorized Signature [In full and initials]: Name and Title of Signatory:

Name of Firm: Address:

Sl. No.	Name of the ULB	Popln. as per 2011 Census (Provisional)*	Present Popln. (2019) as per 2011 provisional Census Data*	Source Enhancement					Clear Water Reservoirs						Length of Pipe Line in kms		Service Connections	Intake Well		WTP		
				Total Supply ending 2018-19 (Existing + Enhanced)					Total Storage Capacity Available ending 2018-19						Rising Main	Distribution Network		Net Total	TOTAL ending 2018-19		TOTAL ending 2018-19	
				Surface Source		Groundwater		Total Qty. from all Sources in MLD	GSR		ESR		Total Storage		Net Total	Net Total			Nos.	Capacity in MLD	Nos.	Capacity in MLD
				Name	Qty. in MLD	Net No. of PWs & Open Wells	Qty. in MLD		Nos.	Total capacity in ML	Nos.	Total capacity in ML	Nos.	Capacity in ML								
1	Division I, BBSR	405900	456600	Daya&Kuakhai Rivers, Naraj,	24.50	190	35.06	59.56	79	38.80	17	6.10	96	44.9	51.24	775.48	0	0				
1	BBSR(Part),P.H. Divn.II,BBSR	308165	401936	Kuakhai	88.05	102	9.35	97.40	35	30.27	14	2.52	49	32.794	76.98	444.11	105102			4	19.5	
1	Bhubaneswar Municipality corporation(BMC) Part under Division III, BBSR	840834 (BMC)	1018281 (BMC) (248099 Division III)	River Mahanadi at Mundali	110.00	49	15.94	125.94	54	64.51	11	4.55	65	69.06	91.34	551.77		2	198	2	198	
2	Balugaon NAC	17645	19440	0	0.00	8	1.03	1.03	4	4.10	1	0.25	5	4.35	17.81	48.18	1934	1	11.5	1	10.5	
3	Banapur NAC	17278	18092	0	0.00	15	0.88	0.88	1	0.50	1	0.25	2	0.75	17.37	23.43	819	0	0	0	0	
4	Jatni Municipality	55925	58218	River Mahanadi at Naraj	9.40	17	3.70	13.10	9	5.63	1	0.75	10	6.38	8.05	69.39	3170	0	0	0	0	
5	Khurda Municipality	46205	53325	River Mahanadi at Mundali/ Daya	7.34	27	1.57	8.91	10	6.73	0	0.00	10	6.73	13.20	142.37	4489	1	4.5	1	4.5	
1	Puri Municipality	201026	243757	DhaudiaNal Samanga	20	95	9	29.00	5	3.96	11	13.36	16	17.32	36.30	274.05	19487	1	44	1	42	
2	Nimapara NAC	19289	22211			11	1.55	1.55	4	0.90	1	0.15	5	1.05	0.00	69.31	1804			0	0	
3	Konark NAC	16779	20101			11	1.14	1.14	4	1.20	1	0.15	5	1.35	0.00	78.61	626			0	0	
4	Pipili NAC	17629	20895					0.65					0	0	0.00	44.61	262			0	0	
5	Nayagarh NAC	17030	20829					2.70	9	3.19			9	3.19	44.66	58.78	1962	2	8.5	1	6.5	
6	Khandapada NAC	9038	9696	1.20		7	0.30	1.50	4	1.00	1	0.50	5	1.5	5.40	22.53	879	1	2.00	0	0	
7	Dasapalla NAC	16206	17930	1.44		4	0.20	1.64	4	0.50	1	0.10	5	0.6	8.00	36.57	400	1		0	0	
8	Ranapur NAC	13544	16316			22	2.04	2.04			2	0.20	2	0.2	0.00	9.80	636			0	0	
9	Odagaon		13096			2	0.20	0.20			1	0.10	1	0.1	2.74	13.44				0	0	
1	Cuttack Municipal Corporation	610189	679154	0	0.00	192	111.00	111.00	20	4.94	17	4.13	37	9.07	35.59	640.06	63198	0	0	0	0	
1	Choudwar	42784	45515	Mahanadi	2.25	38	2.95	5.20	12	3.40	1	0.07	13	3.47	6.00	63.36	2395	1	2.25	1	2.25	

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				Total Supply ending 2018-19 (Existing + Enhanced)				Total Storage Capacity Available ending 2018-19						Rising Main	Distribution Network		Net Total	TOTAL ending 2018-19		TOTAL ending 2018-19		
				Surface Source		Groundwater		Total Qty. from all Sources in MLD	GSR		ESR		Total Storage		Net Total			Net Total	Nos.	Capacity in MLD	Nos.	Capacity in MLD
				Name	Qty. in MLD	Net No. of PWs & Open Wells	Qty. in MLD		Nos.	Total capacity in ML	Nos.	Total capacity in ML	Nos.	Capacity in ML								
2	Banki	17521	18993	Mahanadi	2.00	15	0.86	2.86	6	1.00	1	0.225	7	1.225	1.90	48.85	963	0				
3	Athagarh	17304	19048	Mahanadi	1.50	24	1.50	3.00	4	1.00	2	0.25	6	1.25	6.00	46.58	2130	1	1.5	1	1.5	
4	Kendrapara	47006	53888	River Luna	5.50	13	2.69	8.19	4	3.70	3	0.73	7	4.43	14.51	90.18	4735	1	27	1	27	
5	Pattamundai	36528	39973	0	0.00	18	6.45	6.45	5	2.20	4	1.30	9	3.5	14.15	102.71	3743	0	0	0	0	
6	Jajpur	37458	42253	0	0.00	17	6.36	6.36	1	0.45	1	0.45	2	0.9	0.00	88.76	2823	0	0	0	0	
7	Vyasanagar	48911	56737	Kharasrota	2.50	34	5.99	8.49	5	3.40	4	1.77	9	5.17	14.13	148.10	6812	1	7	1	7	
8	Jagatsinghpur	33631	37979	0	0.00	15	5.73	5.73	2	0.43	1	0.15	3	0.58	0.04	126.49	2085	0	0	0	0	
9	Paradeep	5500	33000	0	0.00	16	2.63	2.63	0	0.00	0	0.00	0	0	0.00	46.72	2647	0	0	0	0	
1	Angul Municipality	43795	49119	Derjang	5.20	12	2.00	7.20	10	3.39	6	1.61	16	5	13.24	97.61	2508	1	9	1	14	
2	Talcher Municipality	40841	46296	River Brahamani	7.00	0	0.00	7.00	8	3.56	1	0.35	9	3.91	8.30	63.92	3069	2	9	2	9	
3	Athamallik NAC	12298	13096	River Mahanadi	1.60	1	0.30	1.90	5	0.74	1	0.20	6	0.94	4.00	43.14	1078	1	1.40	1	1.4	
4	Dhenkanal Municipality	67414	76520	Nil	0.00	37	9.00	9.00	27	5.08	0	0.00	27	5.08	7.50	121.30	3632	0	0	1	6	
5	Kamakhyanagar NAC	16810	18429	River Ramial	1.70	5	0.50	2.20	8	1.43	1	0.01	9	1.44	8.00	30.54	1242	2	2.20	1	1.7	
6	Bhuban NAC	22200	23926	Nil	0.00	8	2.50	2.50	7	1.55	0	0.00	7	1.55	5.07	32.90	2051	0	0	0	0	
7	Hindol NAC	17387	19474	Nil	0.00	5	0.50	0.50	3	0.28	0	0.00	3	0.28	7.62	46	0	0	0	0		
1	Balasore	1,44,373	1,60,500			87	20.79	20.79	13	2.98	5	0.80	18	3.78	3.76	207.06	13,498	0	0	0	0	
2	Jaleswar	25,747	30,300			14	2.90	2.90	3	0.85	1	0.10	4	0.95	1.15	92.52	1,936	0	0	0	0	
3	Soro	32,531	37,300			14	2.68	2.68	2	0.60	1	0.30	3	0.9	0.08	101.48	1,126	0	0	0	0	
4	Nilagiri	17,264	19,800			19	2.20	2.20	6	0.91	1	0.10	7	1.01	5.11	63.26	1,390	0	0	0	0	
5	Bhadrak	1,07,463	1,22,200			27	7.68	7.68	1	0.23	1	0.10	2	0.325	6.56	189.53	2,110	0	0	0	0	
6	Basudevpur	33,690	37,100			16	3.45	3.45	0	0.00	0	0.00	0	0	7.89	101.92	1,386	0	0	0	0	
7	Chandbali	26,884	29,600			13	3.96	3.96	1	0.23	1	0.10	2	0.327	2.88	43.10	1,372	0	0	0	0	
8	Dhamnagar	22,920	25,300			5	0.98	0.98	0	0.00	1	0.10	1	0.1	0.00	33.49	49	0	0	0	0	
1	Baripada Municipality	109743	123364	River Chipat	4.30	75	13.04	17.34	12	2.888	3	0.907	15	3.795	3.79	142.41	12639			1	9	
2	Udala NAC	13152	14446	River Sono	1.08	7	0.89	1.97	5	0.941	1	0.100	6	1.041	1.60	53.45	1221	1	1.5	1	1.5	
3	Rairangpur Municipality	25516	28891	River Khadkhai	1.67	29	1.65	3.32	6	1.456	1	0.23	7	1.683	4.55	74.46	3066	1	1.5	1	3	
4	Karanjia NAC	22865	24080	River Deo	0.96	15	1.13	2.09	6	1.362			6	1.362	3.20	50.43	2210	1	1.5	1	1.5	

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				Total Supply ending 2018-19 (Existing + Enhanced)					Total Storage Capacity Available ending 2018-19						Rising Main	Distribution Network		Net Total	TOTAL ending 2018-19		TOTAL ending 2018-19
				Surface Source		Groundwater		Total Qty. from all Sources in MLD	GSR		ESR		Total Storage		Net Total	Net Total	Nos.		Capacity in MLD	Nos.	Capacity in MLD
				Name	Qty. in MLD	Net No. of PWS & Open Wells	Qty. in MLD		Nos.	Total capacity in ML	Nos.	Total capacity in ML	Nos.	Capacity in ML							
1	Keonjhar	60590	68767	Sanamachhankandana Dam&Kanjhari Dam	8.63	18	0.90	9.53	24	6.875	9	3.075	33	9.95	63.99	130.23	5708	2	17.0	2	16.6
2	Anandapur	39585	43686	-	-	53	4.17	4.17	6	2.350	2	0.45	8	2.8	4.86	79.99	2798	-	-	0	0
3	Joda	46631	54290	River Baitarane	5.00	21	0.63	5.63	6	3.354	1	0.23	7	3.581	12.50	88.04	1021	-	-	1	9.3
4	Barbil	66540	80615	River Karo	3.10	10	0.72	3.82	6	3.05			6	3.05	1.80	53.85	2100	1	5.0	1	5
5	Champua	12839	14380	River Baitarane	1.60	15	0.49	2.09	1	0.60	1	0.80	2	1.4	1.50	45.46	922	1	3.0	1	0.5
1	Sambalpur Municipal Corporation	-	0	(a) Hirakud reservoir (b) Power Chanel (c) Other-07nos (for 54 village)	65.01	50	3.56	68.57	43	21.16	28	5.28	71	26.44	38.13	427.29	25453	8	12.64	6	69.12
2	Rairakhol NAC	-	0	Mahanadi Kiakata	0.00	17	0.74	0.74	11	1.43	2	0.30	13	1.73	32.45	45.33	331	1	3.4	1	3.4
3	Kuchinda NAC	-	0	River Kharla	1.50	11	0.52	2.02	14	0.94	1	0.09	15	1.025	2.45	50.27	1174	1	1.7	1	1.7
4	Deogarh Municipality	-	0	Pradhanpat Water Fall	1.50	20	0.88	2.38	12	1.70	2	0.32	14	2.02	2.45	48.24	2304	0	0	1	1.5
5	Bargarh Municipality	-	0	1) River Zeera 2) Bargarh MainCanal	5.30	46	1.70	7.00	8	6.16	5	2.08	13	8.24	14.04	93.06	2358	1	15	1	15
6	Barpali NAC	-	0	River Ranj	0.30	20	1.78	2.08	2	0.70	3	0.78	5	1.481	0.00	28.42	1336	1	5.25	1	5.25
7	Padampur NAC	-	0	River ONG	1.00	34	2.47	3.47	6	1.73	1	0.20	7	1.927	6.28	35.13	993	1	2.25	1	2.25
8	Attabira NAC	-	0	-	0.00	13	1.00	1.00	2	1.53	1	0.04	3	1.57	0.00	14.96	229	0	0	0	0
9	Bijepur NAC	-	0	-	0.00	6	0.60	0.60	1	0.10	2	0.15	3	0.25	0.00	2.20	350			0	0
50	Biramitrapur Municipality	33442	37056	B' Quarry & Kanshbahal Quarry	2.16	0	0.00	2.16	3	0.33	0	0.00	3	0.33	17.00	36.32	808	0	0	0	0
51	Rajgangpur Municipality	48200	51963	NaktiNallha	3.20	0	0.05	3.25	2	0.452	1	0.225	3	0.677	25.95	141.59	1900	0	0	1	6

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				Name	Qty. in MLD	Net No. of PWS & Open Wells	Qty. in MLD		Nos.	Total capacity in ML	Nos.	Total capacity in ML	Nos.	Capacity in ML							
52	Rourkela (Civil Town) Municipality	275121	322772	River Brahmani & Koel	56.20	0	0.00	56.20	18	16.290	11	6.30	29	22.59	44.91	486.92	29039	5.00	80.85	7	80.6
53	Sundargarh Municipality	47000	55419	River 'IB'	5.39	0	0.00	5.39	16	3.935	2	0.425	18	4.36	2.10	31.71	3782	1.00	4.50	2	4.5
1	Jharsuguda	97730	117175					4.94	11	1.6	3	0.73	14	2.33	14.2	48.42	1870	1	4.5	1	4.5
2	Brajrajnagar	80403	82,922					3.11	4	1.15	0	0	4	1.15	1.8	31.79	677	0	0	1	3
3	Belpahar	38993	44121					0.65	1	0.15	0	0	1	0.15	0	10.42	34	0	0	0	0
1	Balangir	98238	110199	River Mahanadi & Tel	13.88	8	0.62	14.5	11	5.40	8	2.60	19	8	120.4	125.00	7191	1	18	1	18
2	Tusura	10597	12048	River Songarh	0.70	4	0.30	1.00	1	0.20	0	0.00	1	0.2	1.5	17.59	505	1	0.4	0	0
3	Patnagarh	21024	25289	River Subarnarekha & Mayabati	1.50	7	0.60	2.10	3	1.20	1	0.20	4	1.4	7.01	42.09	1194	3	1.5	0	0
4	Kantabanji	21819	25077	Open well	0.20	8	2.08	2.28	3	0.95	2	0.75	5	1.7	4.77	40.75	962	0	0	0	0
5	Titilagarh	31258	35977	River Tel	4.50	0	0.00	4.50	8	4.97	2	0.40	10	5.37	16.37	55.32	2727	1	8	1	6
6	Subarnapur	20770	23932	River Mahanadi	3.47	1	0.01	3.48	7	1.78	3	0.45	10	2.227	2.25	73.10	2884	1	3.5	1	3.5
7	Binika	15765	16828	River Mahanadi	2.12	1	0.03	2.15	4	0.70	1	0.15	5	0.85	3.2	66.51	1054	1	2.25	1	2.25
8	Tarava	8334	8622	River Mahanadi & Tel	1.35	0	0	1.35	2	0.40	1	0.2	3	0.6	1.7	24.10	851	0	0	0	0
9	Boudh	20424	22599	River Mahanadi	2.20	0	0.00	2.20	5	0.88	3	0.60	8	1.48	4.50	57.10	1989	0	0	1	2.2
1	Bhawanipatna	69,045	76394	River Hati & Sagada	8.80	7	0.20	9.00	14	7.135	3	2.00	17	9.135	54.60	143.50	6003	2	9	2	12
2	Kesinga	19,239	21287	River Tel	2.00	6	0.25	2.25	4	2.495	0	0.00	4	2.495	2.50	44.55	911	1	2	1	3
3	Junagarh	19,656	21748	River Hati	2.35	3	0.12	2.47	5	1.05	2	0.43	7	1.48	3.21	48.74	602	1	2	1	4
4	Dharamgarh	15910	17603	River Tel	0.64	14	0.26	0.90	1	0.3	1	0.20	2	0.5	8.50	28.42	262	1	0.5	0	0
5	Khariar	15063	16666	Tikhali Reservoir	0.60	13	1.80	2.40	3	0.85	1	0.20	4	1.05	15.77	45.38	1403	1	3	1	3
6	Khariar Road	18967	20986	River Jonk	1.70	12	0.69	2.39	2	0.65	2	0.40	4	1.05	3.20	40.24	1411	1	2.2	0	0

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				Surface Source		Groundwater		Total Qty. from all Sources in MLD	GSR		ESR		Total Storage		Net Total	Net Total	Nos.		Capacity in MLD	Nos.	Capacity in MLD
				Name	Qty. in MLD	Net No. of PWs & Open Wells	Qty. in MLD		Nos.	Total capacity in ML	Nos.	Total capacity in ML	Nos.	Capacity in ML							
7	Nuapada	16208	17933	SakhatoraNalla	0.10	16	1.35	1.45	1	0.2	1	0.10	2	0.3	0.00	12.61	347	1	0.1	0	0
1	Koraput (M)	47024	51487	Kolab reservoir	6.38	20	0.50	6.88	27	6.510	0	0	27	6.51	18.35	85.00	4649	1	9.00	2	9.08
2	Sunabeda (M)	50302	52807	Karandi reservoir	8.33	3	0.08	8.41	7	5.058	0	0	7	5.058	19.62	66.82	2983	1	27	1	27.24
3	Jeypore (M)	84632	91741	Upperkolab Project	14.00	1	0.00	14.00	9	8.640	1	0.23	10	8.87	6.51	89.45	7539	1	7069	1	32
4	Kotpad NAC	16326	17563	-	2.00	6	0.30	2.30	3	0.710	1	0.2	4	0.91	3.50	34.77	1750	1	6110	1	2.6
5	Nawarangpur (M)	37042	46646	-	0.00	9	2.50	2.50	3	1.587	2	0.43	5	2.014	10.55	33.44	2143	0	2850	0	0
6	Umerkote (M)	28914	32694	-	0.00	20	2.50	2.50	3	1.100	0	0	3	1.1	10.90	43.47	1468	0	500	0	0
7	Malkangiri (M)	30288	37814	Satiguda Reservoir	2.75	2	0.30	3.05	2	1.100	1	0.14	3	1.24	11.55	25.99	2104	2	1806	2	2.77
8	Balimela NAC	12390	13157	Power Channel	1.10	2	0.30	1.40	3	0.700	0	0	3	0.7	2.08	33.00	814	1	5652	1	1.13
1	Rayagada(M)	71208	80063	River Geda	5.50	25	5.36	10.86	6	3.44	2	0.40	8	3.84	10.22	84.70	8773	0	0	1	5.5
2	Gunupur NAC	24162	29998	River Bansadhara	2.50	6	1.10	3.60	3	1.25	1	0.45	4	1.7	13.38	60.83	2275	1	4	1	4
3	Gudari NAC	6931	7209	-	0.00	4	0.49	0.49	1	0.15	1	0.05	2	0.2	1.33	12.23	855	0	0	0	0
1	Berhampur Municipal Corporation	356598	448370	i) Dakhinapur ii) Rushikulya	36.03	95	24.50	60.53	57	31.91	9	5.66	66	37.57	87.85	233.37	32944	2	31.25	4	31.25
2	Gopalpur NAC	7221	8740	-	0	11	1.18	1.18	2	0.56	1	0.02	3	0.58	4.91	18.62	1457			0	0
3	Digapahandi NAC	13190	17037	-	0	6	2.10	2.10	2	0.90	0	0	2	0.9	5.71	20.77	2574			0	0
4	Chikiti NAC	11839	14000	-	0	11	0.90	0.90	4	0.58	0	0	4	0.58	17.27	21.12	687			0	0
5	Paralakhemundi Municipality	44469	52000	Mahendra Tanaya	4.23	13	2.79	7.02	5	4.32	0	0	5	4.32	17.14	54.47	5302	1	2.27	2	12.27
6	Kashi Nagar NAC	9684	11037	-	0	7	1.12	1.12	1	0.16	0	0	1	0.16	2.00	16.52	381			0	0
1	Aska	21428	22040	Intake well2 No(Rushikulya)	1.40	18	1.55	2.95	2	0.35	2	0.40	4	0.75	1.68	21.09	2517	2	2.50	1	1.5
2	Buguda	15176	17038	River Baghua	1.07	14	0.74	1.81	3	0.70	1	0.15	4	0.85	2.95	25.02	1269	1	1.50	1	1.5

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				Name	Qty. in MLD	Net No. of PWs & Open Wells	Qty. in MLD		Nos.	Total capacity in ML	Nos.	Total capacity in ML	Nos.	Capacity in ML								
3	Belaguntha	11297	12518	Bada&Boda river	0.66	6	0.43	1.09	3	0.48	1	0.25	4	0.73	8.19	21.55	1286	2				
4	Bhanjanagar	20482	21215	Rasulkonda reservoir	3.09	0	0.00	3.09	3	1.35	1	0.15	4	1.5	2.38	30.34	2560	1	2.27	1	2.27	
5	Chatrapur	22027	23600	Intake well at Rushikulya1 no.	2.37	31	1.29	3.66	12	2.25	3	0.68	15	2.925	18.70	38.67	3085	1	2.00	0	0	
6	Ganjam	11747	12108	-	0.00	5	1.59	1.59	4	0.54	0	0.00	4	0.54	7.40	16.68	1805	0	0.00	0	0	
7	Hinjilicut	24671	27857	Ghodahada reservoir and river Rushikulya	2.27	14	2.03	4.30	7	2.68	0	0.00	7	2.68	18.06	38.30	3110	3	3.22	2	6	
8	Khalikote	13022	15017	-	0.00	24	1.02	1.02	12	1.01	0	0.00	12	1.01	0.78	17.66	1177	0	0.00	0	0	
9	Kabisuryanagar	17430	18662	-	0.00	16	1.67	1.67	5	0.63	1	0.40	6	1.03	12.07	23.09	2143	0	0.00	0	0	
10	Kodala	13965	15510	Intake well No-1 kharkhari	1.15	8	0.59	1.74	7	0.945	0	0.00	7	0.945	2.90	17.30	1388	1	1.15	1	1.15	
11	Purusotampur	15366	16357	Intake well-1 Rushikulya	0.20	19	1.60	1.80	5	0.31	1	0.30	6	0.61	0.00	21.44	1800	1	0.50	0	0	
12	Polasara	23119	26502	Intake well2 nos (Baghua and dhanei)	1.29	6	0.67	1.96	2	0.90	1	0.15	3	1.05	21.61	22.01	1373	2	1.29	0	0	
13	Rambha	12111	13409	-	0.00	12	0.99	0.99	2	0.38	0	0.00	2	0.38	2.02	13.08	902	0	0.00	0	0	
14	Sorada	14867	15111	Sorada reservoir	2.00	2	0.50	2.50	2	0.49	1	0.15	3	0.64	0.55	9.73	2119	1	2.00	2	3.75	
15	Phulbani Municipality	37371	40761	River pilasalanki	5.36	13	0.94	6.30	10	4.11	3	0.45	13	4.56	5.22	49.49	3989	2	8.27	2	8.27	
16	G.Udayagiri	11302	12340	River pilasalanki	0.60	8	0.33	0.93	3	0.54	3	0.45	6	0.99	7.08	16.80	978	1	0.50	1	0.5	
17	Baliguda	16611	18688	River Khadaga	0.35	5	0.19	0.54	4	1.05	3	0.12	7	1.17	3.15	27.32	172	2	0.35	0	0	
		5284987	6106173		607	2207	395	1017	899	402	268	84	1167	487	1446	9753	514584	93	24627	93	830	