

MITHI RIVER DEVELOPMENT AND PROTECTION AUTHORITY (MRDPA)



Compendium of Empowered Committee

Meeting

MITHI RIVER DEVELOPMENT & PROTECTION AUTHORITY

SEPARATOR

Minutes of the 6th meeting of EC

Sub: Minutes of 6th Meeting of Empowered Committee, Mithi River Development and Protection Authority (MRDPA) held on 12.10.2012

The 6 th meeting of the Empowered Committee of Mithi River Development and Protection Authority (MRDPA) was held on 12.10.2012 under Chairmanship of Hon Chief Secretary at 12.00 noon at 6th Floor, Committee Room, MMRDA building, Bandra Kurla Complex, Bandra (East). Mumbai – 51.

The draft Minutes of the said meeting are submitted at 715 c/s for your kind approval please.

(Shankar Deshpande)

PD & Member Secretary, MRDPA

Hon' Chief Secretary &

Chairman Empowered Committee, MRDPA

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MITHI RIVER DEVELOPMENT & PROTECTION AUTHORITY मिठी नदी विकास व संरक्षण प्राधिकरण

MRDPA

No: MRDPA/2013/09

January 21, 2013

To,
The Hon'ble Chief Secretary,
Government of Maharashtra and
Chairman, Empowered Committee, MRDPA
Room No. 108, Main Bldg,
Mantralaya, Mumbai- 400-032
Tel: 022-22025042, Fax: 022-22028594
E-Mail: chiefsecretary@maharashtra.gov.in

Sub: 7th Empowered Committee Meeting
Ref: Mithi River Development and Protection Authority (MRDPA)

With Highest Regards,

Hon'ble Sir,

The 7th Empowered Committee meeting is scheduled to be held under the Chairmanship of Hon'ble Chief Secretary at 11:30 am on February 5, 2013 at Committee Room No 147, Main Building 1st Floor, Mantralaya, Mumbai 400032. You are kindly requested to make it convenient to Chair the said meeting.

Minutes of the 6th Empowered Committee meeting held on October 12, 2012 is enclosed for your kind perusal.

Thanking you,

Yours Sincerely,

(S.C. Deshpande)

Project Director & Member Secretary

Mobile: 9820563669 E-mail: shankardc1@gmail.com

Encl: As above

MINUTES OF THE 6TH EMPOWERED COMMITTEE MEETING HELD UNDER CHAIRMANSHIP OF HON. CHIEF SECRETARY, GOM. AND CHAIRMAN,EC MITHI RIVER DEVELOPMENT AND PROTECTION AUTHORITY (MRDPA) AT 12 NOON ON 12 OCT 2012 AT 6 TH FLOOR, COMMITTEE ROOM, MMRDA BUILDING BANDRA-KURLA COMPLEX, BANDRA –EAST, MUMBAI 400-051.

The 6th Empowered Committee meeting of the Mithi River Development and Protection Authority (MRDPA) was held under the Chairmanship of Hon. Chief Secretary – GOM and Chairman Empowered Committee at 12.00 noon on 12th Oct 2012 at 6th floor committee room MMRDA Building Bandra - Kurla Complex Bandra – East, Mumbai 400-051.

Prior to this meeting, Hon Chief Secretary conducted a Site visit of the Mithi River works carried out by MMRDA and MCGM .The site visit report is kept at (Annexure – A).

The list of the attendees of the meeting and site visit is kept at (Annexure -B).

At the outset Shri S. C. Deshpande, Member Secretary and Project Director MRDPA requested, Metropolitan Commissioner MMRDA, to welcome the Hon. Chief secretary and Chairman EC, MRDPA on behalf of all to the said meeting by offering a bouquet of flowers, Hon Chief Secretary welcomed the members and directed MS, MRDPA to proceed as per the Agenda.

MS, MRDPA after obtaining the Permission of the Chair commenced with the presentation (Annexure – C). He submitted that the 6th EC, MRDPA meeting is being held after a long gap and therefore the presentation has initial slides regarding the 26th July 2005 rainfall and its occurrence with coincidence of High tide etc. Hon Chairman directed that it was necessary to meet frequently to review the progress of works. After discussions and as suggested by MC, MMRDA it was decided that the EC meeting shall be henceforth held atleast once in three months. (Action: MS, MRDPA)

Hon Chairman expressed that the constitution of the Empowered Committee needs to be amended as the committee needs to have representation from Mumbai Police, SRA and Environment department as Mithi River works carried out by MMRDA and MCGM need interaction and coordination with these departments. After deliberations and as suggested by MC, MMRDA it was decided to include Commissioner of Police, Mumbai, Chief Executive Officer – SRA and Secy Env-GOM as Permanent invitees to the EC, MRDPA. MS, MRDPA assured to note these directions and amend the EC to include these three officials in the EC and invite them henceforth for the EC meetings. (Action: MS, MRDPA.)

MS, MRDPA commenced the presentation and explained about the 944.32 mm Unprecedented rainfall that laid to deluge in Mumbai on 26th July 2005 and its coincidence with the high tide. He explained that such a rainfall was highest in any urban agglomeration as rainfall of such a magnitude has occurred only in Meghalaya in the past. He further explained that the rainfall of 944.2 mm in 24 hrs. that occurred in Mumbai on 26 th july 2005 was about 40 % of the Annual rainfall in Mumbai. (Avg annual rainfall in Mumbai is 2431 mm). About 77 % (1870 mm) of the Annual rainfall in Mumbai occurs in three months (June July and August) and the rainfall on 26th July (944.2 mm) was about 50 % of this three months rainfall. This is therefore referred as Extreme Event.

He further explained about the flow of Mithi river and Vakolla nalla in Mumbai from its origin to its confluence. Certain photographs of the Flooding and statistics of the damage was also presented to emphasis the havoc caused by the floods in 2005. He further explained about the characteristics of the Four rivers that flow in Mumbai ie Mithi, Oshiware, Dhaisar, Poisar.

He further explained about the Longitudinal Section of the Mithi river and its gradient. He explained that the river has a steep gradient i.e bedslope from its origin till the airport. The gradient is Very steep @ 1:200 ,Steep @ 1:450, Moderate @ 1:850, Flat @ 1:4000. The river has ingrees of sea water upto the airport that is about 7 kms upstream of the Mahim causeway. (where the Mithi river meets the

Arabian sea). MS further explained that the Mithi river works on the Mithi river which is 17.84 kms long is carried out in respective portions by MMRDA and MCGM. While on the 11.84 kms from the Origin at Vihar lake to the CST bridge located at south of Airport the Mithi river works are carried out by MCGM and on the balance 6 kms that is from CST bridge to its downstream till the Mithi river meets Arabian sea the Mithi river works are carried out by MMRDA.

As regards to Vakolla Nalla (Total 3.8 kms) the portion from its Origin at South of Domestic Airport near the Western Express Highway the improvement works are carried out by MCGM for a length of 2.0 kms till the Vakolla Nalla bridge on SCLR (Santacruz Chembur Link Road). The Nalla works are then carried out for a length of 1.8 kms by MMRDA till the Nalla has a confluence wth Mithi river at the Bandra - Kurla Complex. He mentioned that the Catchment area of the Mithi river is 7295 ha while that of Vakolla Nalla is 907 ha. The velocity of flow in Mithi river is 2.2 m/s in pre monsoon and increases to 3.3 m/s during monsoon due to rise in water level.

The origin of the Mithi river as the spillway overflow of Vihar lake was explained. The Tulsi lake (135 ha area and 139.17 THD as FSL) with 8046 Million litres capacity spills over in Vihar lake (726 ha area and 80.12 THD as FSL) with capacity of 27698 million litres and the water from Vihar lake spills over into Mithi river and Powai lake with holding capacity of 5455 million litres. (223 ha area and 59.44 THD as FSL).

The MS further explained about the constitution of the MRDPA as an independent authority under the Chairmanship of Hon. Chief Minister by GR dated 19/8/2005. He broadly explained the functions of MRDPA as:

- (1) to approve the Mithi River Development Plan,
- (2) to approve the various projects for implementation of the plan
- (3) to rehabilitate the PAP's affected by the project.
- (4) to identify the implementation agencies
- (5) to coordinate amongst all agencies and review the progress of implementation agencies.

He explained that the MRDPA was empowered by the GR to raise the finance through Central, State, MCGM, MMRDA and other financial institutions.

The MS further explained about the Constitution of EC, MRDPA as per the GR and assured to amend the EC as directed by Hon. Chairman at the start of the meeting to include three officials. The MS further explained about the Project Implementation Unit (PIU) constituted under PD, MRDPA as per the GR and the present acute shortage of the technical and supporting staff. He requested Hon. Chairman to consider sanctioning certain staff with logistics support for effective implementation of the project and for better coordination with the agencies involved. Hon CS and Chairman directed MS MRDPA to strengthen the PIU by recruiting the technical and supporting staff as desired on contract basis and the expenditure on it shall be borne by MMRDA/MCGM.MC MMRDA and AMC MCGM agreed to bear the expenditure incurred by MRDPA on its staff and provide other logistics to enable effective functioning of the MRDPA.(Action: MS,MRDPA,MC,MMRDA,MC,MCGM)

The MS further explained about the actions initiated by MMRDA since 2005 ie appointment of CWPRS for carrying out the Hydrological Study of the Mithi River, appointment of IIT Mumbai to carry out Action plan for environmental Improvement of Mithi River. He further submitted the highlights of the CWPRS recommendations of Jan 2006 regarding the width and depth of the Mithi river and Vakolla nalla to mitigate the floods. He also presented the Recommendations from the IIT Bombay Report of Feb 2006.

Hon Chairman directed that a comparative statement be prepared indicating the recommendations made by the CWPRS, IIT , Achievements by MMRDA / MCGM/ MPCB in respective portions as against the recommendations , shortfalls if any , reasons for delay in implementation of the recommendations, plans for completing the shortfall, timelines and budget provisions to meet the shortfalls and the responsible officer. Hon Chairman also directed to freeze the scope of the work regarding service road , buffer zone etc and indicate chainagewise achievements and pending works in a tabular statement. MS MRDPA assured to obtain the information in tabular format, compile the information received from MMRDA and MCGM in the above format and submit it to Hon Chairman. Hon. Chairman enquired whether MCGM , MMRDA , MPCB has initiated any steps as recommended by IIT Mumbai in its Feb 2006 report regarding stopping dumping of solid waste in Mithi river and constructing 37 treatment plants along nalla etc. AMC MCGM and

Director, MPCB assured to obtain the said information and submit it to MRDPA in a weeks time. .(Action: MS,MPCB,MC,MMRDA,MC,MCGM)

MS MRDPA further submitted Action Taken Report of previous MRDPA and EC meetings and the current status on the issues raised in the previous meetings. Hon Chairman directed MS to prepare a statement of balance works as per the decisions taken in these meetings . .(Action: MS, MRDPA)

The Physical and Financial progress of works done by MMRDA and MCGM was then presented. It was informed that MMRDA has incurred expenditure of about Rs. 396.15 cr (Ph 1 and 2) of Mithi river works and MCGM has incurred about Rs. 552.74 cr (Ph 1 and 2). It was submitted that works of about Rs 83.5 cr are balance from MMRDA and works of about Rs 716 cr are balance from MCGM. AMC-II MMRDA mentioned that MMRDA will complete the balance works by June 2013 as the tender for the works are already under implementation however in works of widening at certain spots Rehabilitation & Resettlement was an issue and needs intervention of Hon Chairman. (Action: Dy.Collector Encroachment, MC, MMRDA, MC, MCGM)

Hon Chairman directed to present the progress with the set target, achievement so far and balance works with definite timelines for completion of the balance works. He directed MCGM and MMRDA to provide Chainage wise information to MS MRDPA within a week time on Mithi river and Vakolla Nalla regarding Deepening, Rock cutting, Widening, Retaining wall, Service road, Buffer zone, Beautification etc. He also directed to provide info on budgetary provision made. AMC MCGM mentioned that MCGM will need three years to complete the balance works as a budget provision of Rs 716 cr in one year is difficult. AMC- II, MMRDA mentioned that the majority of the balance works is about Rock cutting, while AMC MCGM mentioned that majority of the balance works is about the widening of the Bridges across the River. .(Action:MC,MMRDA,MC,MCGM)

Regarding the width and depth achieved by MMRDA and MCGM in their respective portions as against the recommended width and depth by CWPRS and as finalised by MRDPA ,MC MMRDA explained that almost at all the stretches the width and depth have been fully achieved. Hon Chairman expressed satisfaction about the

work done by MMRDA and MCGM and enquired about the hurdles in achieving widening at certain sections. AMC- II MMRDA mentioned about the decision on eligibility of encroachment, Annexure -2, legal issues as main hurdles. AMC, MCGM also said that the removal of encroachment, non-availability of Police protection as reasons for non-completion of work.

Regarding encroachment removal MS MRDPA submitted that along the Mithi river and Vakolla Nalla total structures which were affected by widening and service road is 7124.(5669- Mithi river, 1455- Vakolla Nalla) Out of the total 7124 structure's, 4061 have been removed and 3063.(1899- Mithi river, 1164- Vakolla Nalla) is balance. Out of the 1899 balance structures on Mithi river 760 are within MMRDA jurisdiction and balance 1139 are in MCGM jurisdiction. Out of the 1164 balance structures on Vakola Nalla 588 are within MMRDA jurisdiction and balance 576 are in MCGM jurisdiction. It was also mentioned that out of the total 5669 structures that are affected in widening and service road of Mithi river 3770 structures are removed and 1899 structures are balance to be removed. It was also mentioned that out of the total 1455 structures that are affected in widening and service road of Vakolla Nalla 291 structures are removed and 1164 structures are balance to be removed. Hon Chairman directed that all the encroachments need to be removed immediately and Mithi river works need to be completed on priority. MC MMRDA and AMC MCGM agreed to initiate steps with the help of Police Commissioner. .(Action: Police Commissioner ,Mumbai,Dy.Collector Encroachment,MC,MMRDA,MC,MCGM)

MS MRDPA mentioned about the pilot studied carried out by MMRDA in cleaning the Mithi river. He mentioned that due to the Bio remediation treatment the characteristics of Mithi river water have shown substantial improvements. The PH value has been increased from 7 to 8.2. The Dissolved oxygen levels have increased from 0 to 2.2 ppm. The BOD value has decreased from 435 to 23 ppm and the COD value has decreased from 1120 to 61 ppm. MC MMRDA informed that MMRDA does a sample testing every month from the laboratories at VJTI, MCGM and TMC. Hon Chairman expressed satisfaction at the pilot study carried out by MMRDA.

MS MRDPA further explained about the Works carried out by MIAL in providing additional box drain below the runway as recommenced in the Chitale Committee recommendations.

MC MMRDA mentioned about desilting presently carried out by MMRDA.and desired that the entire sections work be carried out by MCGM. Hon CS directed MCGM to undertake Annual desilting and cleaning in entire stretch and especially the MMRDA stretch from CST to Mahim cause way through MCGM budgetary provision and henceforth MMRDA shall not be responsible for any works of desilting and cleaning of MMRDA and Mithi river and Vakola Nalla., AMC, MCGM agreed that MCGM will take up the works of cleaning and desilting and channelization of Mithi River and Vakola Nalla in entire stretch through MCGM Budgetary provision. .(Action:,MC,MMRDA,MC,MCGM)

Hon. Chief secretary and Chairman, EC MMRDA directed MCGM and MMRDA to complete the Mithi River Works expediently and without any further delay. The meeting ended with thanks to the chair.

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MITHI RIVER DEVELOPMENT & PROTECTION AUTHORITY मिठी नदी विकास व संरक्षण प्राधिकरण

No: MRDPA/2012/

October 11, 2012

Sub: 6th Empowered Committee Meeting- Site Visit
Ref: Mithi River Development and Protection'Authority (MRDPA)

Respected sir,

Please refer to our earlier letter dated October 8, 2012 regarding 6th Empowered Committee meeting and the site visit. The site visit program is as follows:

CHIEF SECRETARY'S SITE VISIT TO MITHI RIVER PROJECT Day & Date: Friday, 12th October 2012

Time	Event	Venue
09.30 a. m.	Arrival at Mahim Causeway, Opp. Mahim Church- Alighting in MMRDA Bus – Cars to be sent to MMRDA office –BKC -	Witness blasting of Mithi River Rocks from Bandra Reclamation side
10.00 a. m.	Departure to Airport	Visit to Mithi River Works under runway at Airport
10.45 a.m.	Dep. To BKC for Mithi river works	Travel from Airport to Vakolla SCLR Road upto CST bridge (below Vakolla flyover turn left towards hotel Grand Hyatt) CST bridge to BKC New Mithi Bridge, To MTNL Bldg, Hills behind American School, to service road of Mithi river to RMC plants to NSE Building to Vakolla Bridge to garden Opp Jetwan walk in garden to MMRDA office.
12.00 p. m.	Arrival at MMRDA for 6 th Empowered Committee meeting of MRDPA	6 th Floor Committee room, MMRDA Bldg., BKC
01.30 p. m.	Lunch	MMRDA

You are kindly requested to make it convenient to attend the said Site visit. Thanking you,

With High Regards,

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Yours Sincerely.

11.10.2012

(S.C. Deshpande)

Project Director & Member Secretary

Mobile: 9820563669

E-mail: shankardc1@gmail.com

Annexure A

A report on the Mithi River visit made by Hon. Chief Secretary , GoM and Chairman EC, MRDPA on 12.10.2012

Hon Chief Secretary, GoM and Chairman EC,MRDPA along with MC, MMRDA, AMC(II), MMRDA, AMC,MCGM, MS,MRDPA, Collector, Mumbai Suburban, Collector, Mumbai City and others made a site visit on the Mithi River project on 12.10.2012. The gist of the site visit is as follows:

Sr	Location	Description of site visit	Photograph
No 1.	Mahim Causeway	Mithi River confluence with the Mahim Bay has rock outcrop and MMRDA has appointed contractor to remove the rock crop in order to achieve the bed slope as recommended by CWPRS. The removal of rock is done by controlled blasting the blasting was carried out at 9.45 am on 12.10.2012 in the presence of the officials of MMRDA and MCGM.	ROCK BLASTING
2.	Banks of Mithi River along the garden opposite Jetwan Building	The work carried out by MMRDA regarding protection of bank and Mangroves was shown to Hon. CS by MC, MMRDA and Hon. CS and others walked along the gabbian wall constructed by MMRDA. MC, MMRDA also explained about the pollution control measured carried out by MMRDA in this section and Hon. CS appreciated the work. He also directed MMRDA to restore the paver blocks and clean them regularly	Hon. Chief Secretary GoM, MC,MMRDA, AMC, MCGM & AMC(II), MMRDA, MS MRDPA inspecting Mithi River Works
3.	Vakola Nalla Bridge	MS, MRDPA informed Hon. CS about the confluence of Vakola Nalla with the Mithi river at BKC. He also explained about the retaining wall constructed on both side of Vakola Nalla	Vakola Nalla confluence with Mithi River Bandra –Kurla Link Road, BKC
4.	CST Bridge	MS, MRDPA informed CS, MRDPA with flowed from Vihar Lake up to CST Bridge was under jurisdiction of MCGM and the portion of Mithi River from CST bridge to Mahim cause way was under jurisdiction of MMRDA. AMC MCGM informed about removal of slum along the bank of Mithi river near the CST bridge.	CST Bridge on SCLR . Upstream - MCGM Jurisdiction, Downstream - MMRDA Jurisdiction

5.	Krantinagar Bridge	AMC, MCGM explained Hon. CS about the construction of Krantinagar Bridge at an higher level than the earlier one as the entire area was a chronic flood area during the 2005 floods. MS, MRDPA also explained Hon. CS about the new box duct constructed by Airport under the runway as per the IIT Delhi Design and FFC report. Hon. CS acknowledge the increased carrying capacity of the river and the work done by MIAL in construction of the box drain. The level difference between the old and new bridge at Krantinagar was substantial however Hon. CS directed AMC, MCGM to complete the work on	Kranti Nagar Bridge – Upstream &
6.	Banks of Mithi river behind American School of Mumbai , BKC	the downstream. MC ,MMRDA explained about the pylons shifting done in order to widen the Mithi river , construction of retaining wall , 200 m wide Mithi river. The encroachment behind taximen society was also shown to Hon . CS and the problems regarding removal of slums was explained by AMC(II), MMRDA. CS directed the collector to decide upon the eligibility of the encroachers quickly and ask MMRDA to complete the work immediately.	Banks of Mithi River BKC

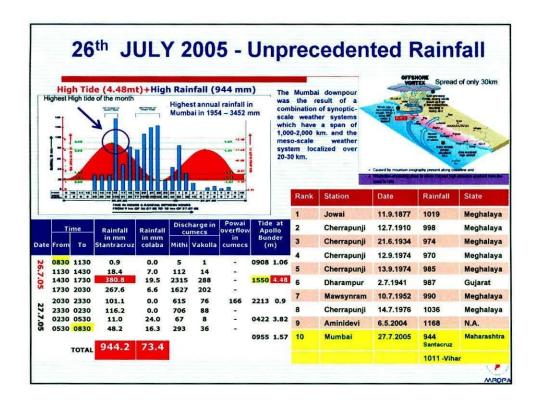
Annexure-B

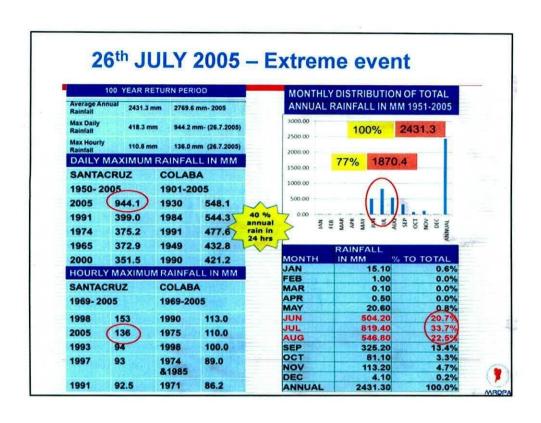
List of participants of the 6th Empowered Committee meeting of Mithi River Development and Protection Authority held on 12th October, 2012 at 12.00 Noon at 6th Floor Committee Room, MMRDA Building, Bandra-Kurla Complex, Bandra (E), Mumbai- 400 051

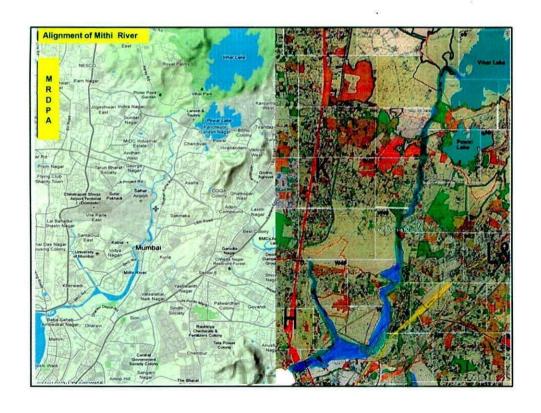
Sr No.	Name	Designation and Organization
1	Shri J. K. Banthia Hon'ble Chairman, Empowered Committee, MRDPA	Hon'ble Chief Secretary, Government of Maharashtra
2	Shri. Rahul Asthana Member	Metropolitan Commissioner, MMRDA
3	Smt. Ashwini Bhide Special Invitee	Addl. Metropolitan Commissioner (II), MMRDA
4	Shri. Aseem Gupta	Addl. Municipal Commissioner, MCGM
5	Shri. Shrikant Deshpande	Secretary, (Accounts and Treasuries) Finance Dept. Government of Maharashtra
6	Shri. S. S. Zende Special Invitee	Chief Executive Officer, Slum Rehabilitation Authority
7	Shri. C. V. Oak Special Invitee	Collector, Mumbai
8	Shri. Sanjay Deshmukh Special Invitee	Collector, Mumbai Suburban
9	Shri. Shankar Deshpande Member Secretary	Project Director, MRDPA
10	Smt. Seema Dhandaree	Joint Secretary, Urban Development Department (II)
11	Dr. B. N. Patil	Director, Environment Dept. Government of Maharashtra
12	Shri. T. Nagendra	Joint Director, CWPRS
13	Prof. R. S. Jangid	Civil Engineering Dept. IIT Bombay
14	Dr. Shalini Tandon	NEERI
15	Shri. R. R. Vasave	Sub-Regional officer, MPCB
16	Shri. Charudatta Deshmukh	Director, Planning MIAL
17	Shri. S. B. Tamsekar	CE, MMRDA
18	Shri. L. S. Vhatkar	Director, MCGM
19	Shri. V. G. Patil	Chief, SDC, MMRDA
20	Shri. P. K. Das	Architect
21	Shri. Gajbhiye	SE, MMRDA
22	Shri. M. S. Narkar	EE, MMRDA

23	Shri. N. M. Gambhir	EE, MMRDA
24	Shri. R. B. Tare	Dy. CE(Bridges), MCGM
25	Shri. C. B. Manwani	Sr. Vice President, Projects MIAL
26	Shri. Ramesh Bhatiya	MIAL
27	Shri. Shantanu Ghosh	MIAL
28	Shri. Gajanan	MIAL
29	Shri. Sudhir Katkar	MIAL
30	Shri. S. L. Jadhav	AE (Bridges), MCGM
31	Shri. S. G. Thakare	Sub Engg. (SWD), MCGM
32	Shri. R. J. Rajput	Sub Engg. (Bridges), MCGM
33	Shri. Sudhir Nimbalkar	SE (SWD), MCGM
34	Shri. N. T. Manchekar	EE(SWD) ES, MCGM
35	Shri. Uday Patil	Research Officer, CWPRS
36	Shri. M. M. kurumbhati	MCGM
37	Shri. Nagrale	EE (SWD), MCGM
38	Shri. P. Kandalkar	AE(SWD), MCGM
39	Shri. Satish	MCGM
40	Shri. Prakash Patil	MCGM
41	Shri. C. M. Marathe	MCGM
42	Shri. A. N. Kargutkar	Project Manager, MMRDA
43	Shri. Virag Mishra	DE-1, MMRDA







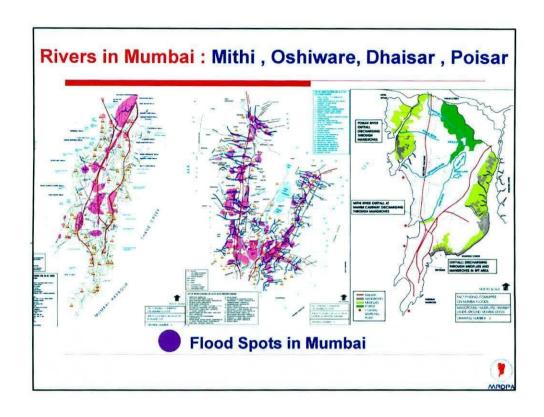


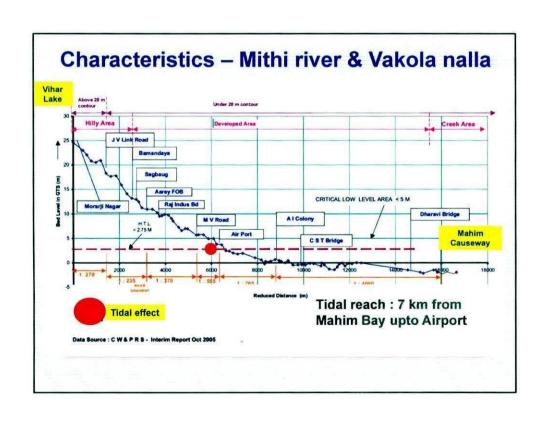


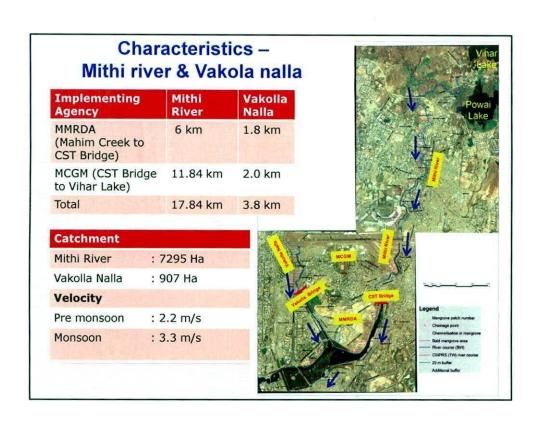
26th July 2005 - Flood Damage

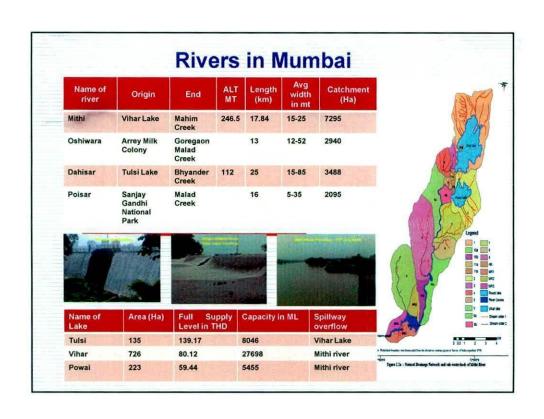
- · Suburban trains stopped, tracks submerged, Vehicular traffic halted
- 200 Kms road length submerged, Airport under water, Cellphone, MTNL and Power –disrupted
- · @ 1.5 lakh people stranded at CST /Churchgate 24-48 hrs in transit
- · @ 20,000 Vehicles stranded,
- @ 24000 Animal deaths.
- · @ 2500 Buses non operational, 140 marooned
- · @ 2 Lakh metric tonnes garbage cleared with 1000 dumpers/JCBS
- · 450 dead in flood, 248 dead later
- · 1 lakh houses under water



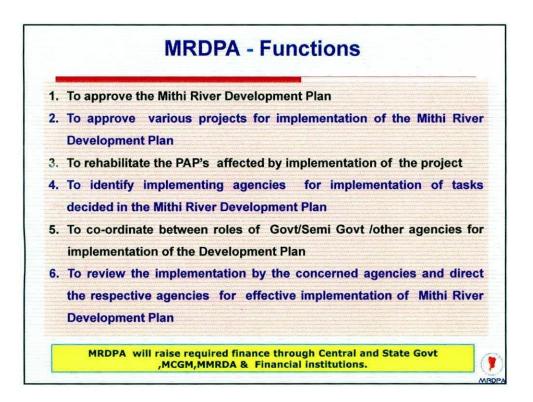








-GOM vide GR dated 19th August 2005 constituted a independent	endent authority
The Hon'ble Chief Minister	Chairman
The Hon'ble Deputy Chief Minister	Vice Chairman
The H'ble Minister for Revenue	
The H'ble Minister for Finance & Planning	
The H'ble State Minister for Urban Development	
The Mayor MCGM	
The Chairman ,Standing Committee ,MCGM	
The H'ble MP's & MLA's – Concerned areas	Members
The Chief Secretary to GOM	
The Metropolitan Commissioner ,MMRDA	
The Principal Secretary -UDD-1, UDD-2, ENVIRONMENT, REVENUE, HOUSING	G,
The Municipal Commissioner , MCGM	
The Secretary Special Projects- GAD.	
The Director- IIT Mumbai and NEERI Nagpur	
The Environment Expert nominated by Govt	





Appointment	Agency	Brief scope	Current status – October 2012
12 th AUG 2005	CWPRS, Pune	Hydrological Study for mitigating floods in Mithi River & Vakolla Nalla	Interim Report submitted on 16 th Jan 2006 (certified as Final on 18 th Dec 2009)
Sept 2005	CESE,IIT Mumbai	Development of Action plan for Environmental improvement of Mithi river	
Sept 2005	WAPCOS,New Delhi	Study for flood mitigation of Dahisar, Poisar &Oshiware river in Mumbai suburbs.	
Sept 2005	MERI ,Nashik	Study for flood mitigation of Ulhas &Waldhuni river in Thane District of MMR	Awaited

CWPRS – Recommendations to Mitigate floods

Report - Jan 2006

1-D mathematical model study - Channelisation of Mithi river 100 year return period Side Slopes 1:5 and 1:2

Agency Chainage	Section	Existing bed width in m	Recom. bed width in m	Recom. Deepening in m
MMRDA	Mahim to Dharavi Bridge	60	100	1.0 (Remove Rock outcrops)
0-5883	Dharavi Bridge to C.S.T Bridge	175	200	1.33
	C.S.T Bridge to MV Road	25	100	2.11
MCGM	MV Road to JVLR	15	60	1.77
5883-17840	JVLR To Morarji Nagar	15	40	0.57
	Vakolla Nalla	40	60	1.5-2.0

CWPRS suggested raising Bank level to avoid floods . No Holding Pond required Discharge carrying Capacity would Double by recommended cross sections of Mithi river & Vakola nalla .



Development of Action Plan for Environmental Improvement of Mithi River - IIT Bombay, Feb 2006

Environmental aspects for 200 m stretch on either side of Mithi river & development of action plan and to determine pollution load

The recommendations include:

- 1. Creation of buffer Zone, Minmum 20 m wide on both banks. Area should be immediately declared as Ecozone
- 2. Rain water harvesting compulsory for all developments in catchment of Mithi, Vakolla and tributaries.
- 3. Creation of holding ponds.
- 4. Removal of Hutments in phases up to 30 m.
- 5. Industries within 15 m to be removed and industries in next 30 to be permitted with zero discharge. Industries to set up CETP.
- Stop dumping and discarding of solid waste along the river.
 Municipal Corporation should review Solid waste collection and disposal within 500 m on either side.
- 7. Total 37 treatment plants for nallas before entering in to river have been proposed.

Fact Finding Committee (Dr.Chitale, Chairman) March 2006- Recommendations

- Preparation of contour maps of all watersheds. Stream gauging measurement of flow , Implement automatic rain gauges,
- Maintenance of Storm Water network -desilting, removal of obstructions, rehabilitation of SWD, ban on plastic, 100% desilting. Removal of obstructions/ constrictions -water pipes, drain pipes, cables. Additional gated outfalls/ pumping stations / holding ponds
- 3. BRIMSTOWAD report (1993) be reviewed / revised
- 4. Immediately provide minimum buffer strips of 15 m on both sides of the Mithi channel for access, for maintenance and for management.
- 5. The waterway below the taxi bay be widened from 27 m to 40 m.



	Acti	on Taken Report on	MRDPA Meetings: 1-6
Mtg. No	Date	Issue discussed in Authority Meeting Chairman- Hon. Chief Minister	Status as on October 2012
1	01-Sep-05	Undertake Hydrologival Study of of Mithi, Dahisar, Oshiwara, Poisar, ulhas, waldhuni	Study Completed by , IIT Bombay, CWPRS, Pune WAPCOS Delhi, MERI, Nashik
2	01-Oct-05	Remove illegal structures Prepare Hydraulic Model Remove unauthorized industrial units.	R&R done by MMRDA CWPRS – under progress MPCB- issued closure directions- 470 units
3	26-Oct-06	Consider FFC and CWPRS for width finalization on practical basis in view of legal and religious structures.	Finalized in 6 th Meeting on 25.5.2010
4	20-Apr-07	Widening of Mithi river as per Published DP Widening of bridges on Mithi	Finalized in 6 th Meeting on 25.5.2010 Improvements of 15 bridges undertaken, 5 complete by MMRDA & MCGM and 5 balance.
5	05-May-08	Study of marine platform to reduce R&R Meeting with concerned MLA to be held for width finalization	Proposal dropped – Financially non viable, widening retaining wall considered Meeting held on 13.5.2008- width finalized in 6 th Meeting or 25.5.2010
		Follow up with Gol for financial assistance Finalize width, of Mithi and Vakolla considering FFC, CWPRS, IIT (B) and practical consideration	Pending with Gol Width finalized plan approved.
		Sluice gate	Proposal dropped as technically non feasible-CWPRS by EC on 3.1.2010.
6	25-May-10	Protection wall	Retaining wall work in progress
		Service road along the bank of river	To be incorporated in revised DP of MCGM
		MIAL widening work within airport	Widened as per Prof. Kapil Gupta – IIT Bombay (29.9.2010 report) - existing 27 m old culvert + proposed 2 cell Box culvert each 12 m wide and 4.1 m deep. Work completed o 31.05.2012

Mtg No	Date	Issue discussed in Empowered Committee Chairman – Hon. Chief secretary	Status as on October 2012
1	20-Dec-05	Decide implementing strategy for mitigating floods Provision of staff to MRDPA Approval of Block estimates for MMRDA Phase –I Action by MPCB Finalization of logo for MRDPA Encroachment mapping to be done for 30 m width on both banks	As per CWPRS, FFC, IIT(B), Action completed Pending Phase –I works completed Action initiated , notices issued Approved Work completed by MCGM/MMRDA/Collector jointly.
•	02-Jan-06	R&R of PAP for 30 m width- app. 6000 residential and commercial structures. MUIP R&R to be made available. 1800 tenements from MMRDA , 2000 from SRA , 3600 from SPPL to be made available	Socio Economic Survey done by IIT (B), R&R done,
2	02-3411-06	Bock estimate, Corpus fund for MRDPA (5 Cr. Each MMRDA & MCGM)	MMRDA and MCGM to implement respective works MRDPA to monitor. Phase I & II works completed. Pending
		Staff to be provided on deputation	Pending
		Finalize feasible alignment of Mithi and Vakolla	Finalized in 6th Meeting of MRDPA
3	06-Nov-06	Phase – II estimates prepared by MMRDA with TCE Approach JNNURM for funding online with BRIMSTOWAD ULC lands to be transferred to MMRDA	Work completed Pending with Gol Action pending
		Construction of Retaining wall by private developer in BKC and beautification of river banks	MMRDA appointed consultant.
4	13-May-08	Meeting held with Hon'ble MLAs as decided in 5th MRDPA meeting held on 13.5.2008 to decide feasible width of Mithi and Vakolla in view of CWPRS, FFC, IIT(B).	Finalized in 6th Meeting of MRDPA
5	15-May-08	Review of phase I and phase II works , rectangular section suggested as against trapezoidal section suggested by CWPRS by construction of retaining wall instead of buffer zone.	Finalized in 6th Meeting of MRDPA
		Widening of bridges to be undertaken. Master plan of Mithi river to be submitted to authority	Improvements of 15 bridges undertaken, 5 complete by MMRDA & MCGM and 5 balance.

SR No	Physical Progress	Phase –I Completed	Phase – II Completed
1	Deepening and rock cutting (Lakhs cum)	5.10 (100%)	29.61 (Deepening -100%, Rock Cutting -52%)
2	Widening (Lakhs cum)	3.2 (100%)	8.38 (76%)
3	Retaining Wall (Km)	NIL	6.4 (84%)
4	Service Road (Km)	NIL	2.5 (25%)
5	Beautification (km)	NIL	0.9 (82%)
SR No	Financial Progress	Phase –I Completed	Phase – II Completed
1	Expenditure Incurred	34.50 Cr	361.65 Cr
P.B	Total		396.15 Cr.

SR No	Physical Progress	Phase –I Completed	Phase – II Completed
1	Deepening and rock cutting (Lakhs cum)	3.47 (100%)	9.55 (Deepening -95%, Rock Cutting- 69%)
2	Widening (Lakhs cum)	2.31 (100%)	3.57 (90%)
3	Retaining Wall (Km)	NIL	8.5 (45%)
4	Service Road (Km)	NIL	0.5 (1%)
5	Beautification (km)	NIL	NIL
SR No	Financial Progress	Phase –I Completed	Phase – II Completed
1	Expenditure Incurred	28.84 Cr	523.9 Cr
	Total		552.74 Cr

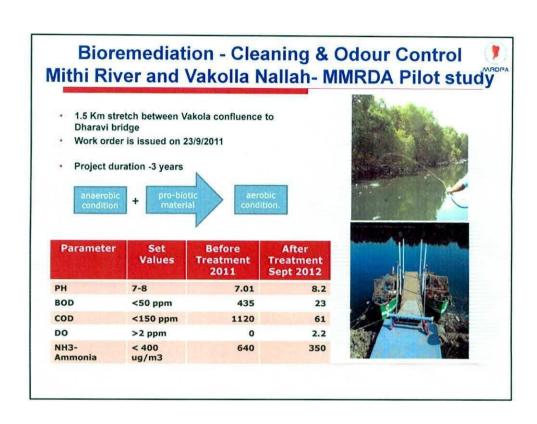
Item	MMRI	MCGM	
Service Road	1.18 km		18 km
Retaining Wall	1.18 km	46.50 Cr	11 km
Deepening and Widening	300 m	2.0 Cr	800 m
Others	1.95 lakhs Cum (Rock Cutting)	35 Cr	6 Bridges
Total Cost		83.5 Cr	@ 716 Cr.

-	0.									All din	i in m
	Sr No		0	£		MRDPA		WIDTH			TH
g e n c			Chainage FFC width	FFC wid	CWPRS		Start of Phase – I (March 2006)	End of Phase – I (June 2006) / Start of Phase – II (April 2007)	Width achieved as on May 2012	CWPRS depth Rec.	Achieve Depth
	1	Mahim cause way to Dharavi Bridge	0-1280	100	100	100	60-100	96.52	96.52	2.15	2.10
	2	Dharavi Bridge to Mini Confluence	1280-3300	200	200	200	65-265	193.25	193.25	2.65	2.60
	3	Mini Confluence to New Mithi Bridge	3300-5400	200	200	100-160	100-130	100-160	110-175	2.6	2.70
	4	New Mithi Bridge to CST Bridge	5400-5883	200	200	70-100	35-60	35-62	70-110	2	2.20
	1	CST bridge to Airport culvert	5883-7815	60-100	100	100	15-22	45-60	100	1.5	1.39
	2	Airport Culvert to Marva FOB	7815-10920	30-60	60-100	30-100	8-20	30-60	30-60	1.2	1.21
	3	Marva FOB to JVLR Bridge	10920- 13720	20-25	40-60	20-30	8	25-30	25-30	1.35	1.46
	4	JVLR Bridge to Pipeline Road	13720- 15500	20	40	20-25	6	25	25	0.95	0.94
	5	Pipeline Road to Natural Valley of vihar lake	15500- 17040- 17840 (Vihar Lake)	20	40	20	6	20	20	0.95	0.89

										All d		
ir lo	Stretch details Chainage								WID	TH	DEPT	H
		Chainage	Chainage FFC width CWPRS width	CWPRS width	CWPRS width	Start of Phase – I (March 2006)	End of Phase – I (June 2006) / Start of Phase – II (April 2007)	Width achieved as on May 2012	CWPRS depth Rec.	Achieved Depth		
1	Mini confluence -Vakolla & Mithi	0-705										
2	Vakolla bridge to SCLR bridge	705- 2450	60	60	60	25-40	25-40	60	2.25	2.5		
1	SCLR to Airport	2450- 3800		60	28-30	15-25	15-25	28-30	2.25	2.5		

Mithi River	MMRDA (0-5883 M)	MCGM (5883-17840m)	TOTAL	
Total encroachment as per MRDPA width Phase-I + Phase II	3408	2261	5669	
Encroachment removed as on Sept2012	2648	1122	3770	
Balance encroachment to be removed	760 (Widening-70, Service Road 690)	1139	1899	
Vakola Nalla	MMRDA (0-705-2450M)	MCGM (2450-3800 m)	TOTAL	
Total encroachment as per MRDPA width Phase-I + Phase II	879	576	1455	
Encroachment removed as on Sep2012	291	0	291	
Balance encroachment to be removed (Widening -481& Service Road -107)	588	576	1164	
Balance encroachment to be removed Mithi and Vakola as on Sep 2012	1348	1715	3063	
ncroachment removal balance - New Mithi Bridge , Parigh Khadhi Kranti nagar. Baman dayan, Mahakali agar, Ganesh pada , Filter pada etc. Valmiki Nagar, faharashtra Nagar	Mithi River + Vakolla Nalla, Widening + Service Road. MMRDA + MCGM			
Constraints: Annexure II pending from Dycl.Encr.	Total Encroachment	7124		
Appeals pending with Div. Comm, Court Cases,	Removed Encroachme	nt 4061		

		RESEA		tus - MMRDA + MCGM Encroachment removal			
Portion	Agency		Section	Total affected structures	Structures removed as on Sept. 2012		
M R	MMRDA MCGM	Widenii	ng	4923	3714	1209	
T V H E	MMRDA MCGM	Service	Road	746	56	690	
I R	Total : Wide	ning and	Service Road	5669	3770	1899	
V A N	MMRDA MCGM	Widenii	ng	952	187	765	
K A O L	MMRDA MCGM	Service	road	503	104	399	
L L L A	Total : Widening & Service Road			1455	291	1164	
Mitih + /akolla	MMRDA + MCGM	Widenii Road	ng and Service	7124	4061	3063	
	llotment Status			llotment Status			
Location Nahur		Units 47	Vashi Naka (Diw		Units 492	Cut off date	
Natwar Pare	kh	1198	Lallubhai	all)	492	of Eligibility	
Oshiwara		148	Tungwa			is 1.1.2000	
Poonam Nag	ar	124				5 1.1.2000	
Motilal Nehri	u Nagar	119	Total		4362		





Date	Tasks	Amount Rs.in Crs.
2006	Proposal sent to Gol, by MMRDA	1284.35
2006	NEERI , Appraisal agency JNNURM recommended to MOUD, GoI (Deducted R&R, Sluice gate and O&M)	911.38
2007	MOUD, Gol revised proposal	706.37 (MMRDA - 504.58, MCGM -201.79)
2007-09	Meeting with Cabinet Secretary, Proposal transferred from MOUD to CWC as Additional Central Assistance (ACA).	
23-12- 2009	MMRDA sent revised DPR for Phase-II works to Ministry of Water Resources, Gol.	1657.11 (MMRDA – 417.51, MCGM - 1239.60)
2009-12	Follow up with Gol, sent revised DPR and further details as required by CWC.(ACA awaited).	1657.11 (MMRDA – 417.51, MCGM - 1239.60)

DATE	Particulars
21/10 2005	Closure Directions issued to 142un-consented units.
28/2/ 2006	Closure Directions issued to 183 un-consented industrial units and list of 157 un-consented Industrial Estates.
01/03/2006	High Court Order DIRECTS to take action against the industrial units within a stretch of 30 meters on bank of Mithi River. Total number of Office complexes, Godowns and Commercial establishments found within 30 meters of stretch-880 Nos.
27/03/2006	Closure directions issued to 470 units ,30 Meters on both sides of the river.
28/03/2006	Closure directions issued to 33 Units ,to whom show cause notices were issued earlier.

Sr. No.	Location	Executing Agency	Proposed Span in (m)	Existing Span in (m)	Present status	
1	Vakola Bridge	MMRDA	60	60		
2	University Bridge	MMRDA	60	60		
3	New Bharat Nagar Bridge	MMRDA	60	60	Completed	
4	Foot Over Bridge at Dnyaneshwar Nagar	MMRDA	60	60		
5	New Mithi Bridge	MMRDA	100	100		
6	Mahim Causeway	мссм	100	44		
7	Tansa Watemain	MCGM	100	70	Environmental	
8	Vaitarna watermain	MCGM	100	50	Clearance awaited To be confirmed by MCGM	
9	Sion-Dharavi Bridge	MCGM	100	60		
10	CST Bridge	MCGM	100	37		
11	Vakola Pipeline Bridge	MCGM	60	22		
12	Bridge on Mithi River at Bamandaya Pada	мссм	28.75	30.4		
13	Bridge on Mithi River at Ashok Nagar	мссм	45		Work is in progress	
14	Reconstruction of Bridge at Kurla Kalina Road	MCGM	130	46		
15	Reconstruction of Bridge at Kranti Nagar	MCGM	102	31.5		

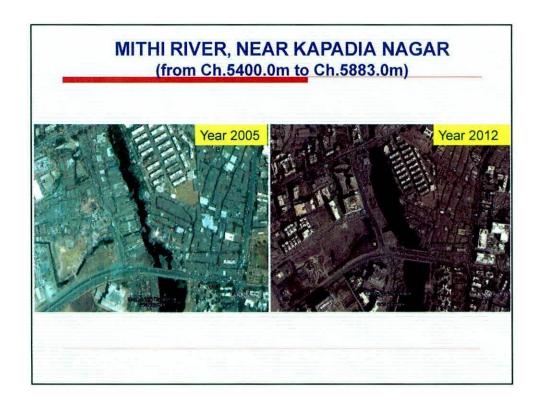
Achivements 2005-2012 FLOOD CONTROL

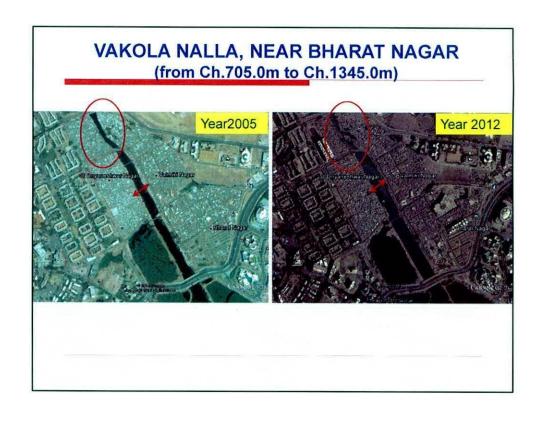
- · River has been widened by average 30 mt width.
- River has been deepened by average 2.0 mt depth.
- Increase in water holding capacity 2.0 times.
- Increase in river discharging capacity 3.0 times.
- BED SLOPES Resulted in increased flushing activity
- Decreased water pollution
- Embankment protected due to retaining walls.
- Encroachments restricted due to retaining wall.
- Service road facilitates periodic maintenance work.
- Reduction in siltation
- · Enhanced aesthetic view

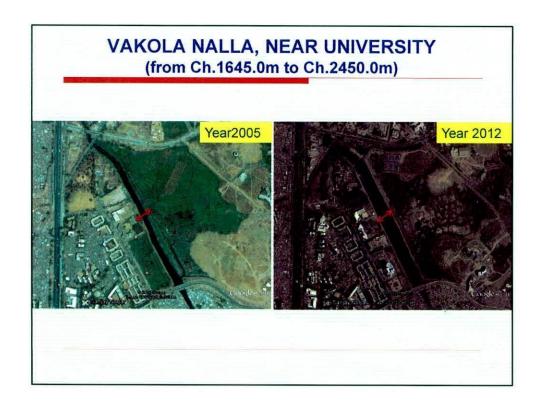
Hurdles

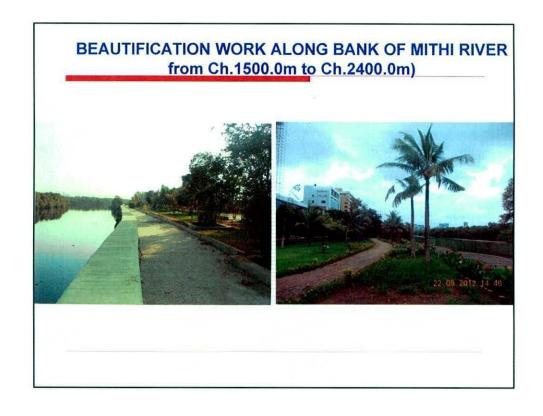
- Encroachment removal Eligibility undecided
- Religious structures
- Authorized structures Tenant, Owner
- Commercial & Industrial R and R
- Utilities
- Service road is not possible through out the length of river and nalla
- MOEF Clearance
- Court cases
- Land acquisition

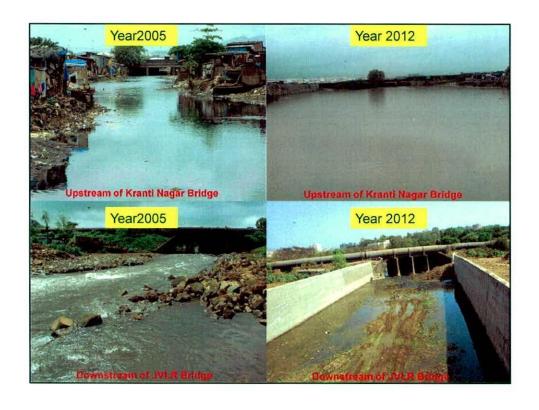
MRDP

















MITHI RIVER DEVELOPMENT AND PROTECTION AUTHORITY.

Action Taken Report of the 6th Empowered Committee Meeting dated 12/10/2012

Chairman: Hon'ble Chief Secretary, GOM & Chairman EC - MRDPA

Venue: MMRDA Bldg, BKC, MUMBAI

Sr. No.	Issues decided in the Meeting	Action Taken	Implementing Agency	Status as on 5 th February 2013
1	Frequency of meetings - meet once in three months	Last meeting on 12.10.2012	MRDPA	Complied: Meeting held after three months.
2	Amendment to Constitution of Empowered Committee to include as Permanent Invitees - Commissioner of Police, Mumbai - CEO, SRA, - Secy., Environment	CP, Mumbai, CEO, SRA, Secy. Environment Invited as permanent invitees in today's meeting.	MRDPA	Complied: Invitation letter sent on January 21. 2013 and acknowledgement receipt received.
3	Strengthening of Project Implementation Unit	File put up to MC, MMRDA,	MRDPA	Under discussion: Minimum 2 Deputy Engineers from MMRDA and 2 Sub Engineers from MCGM needed on deputation in MRDPA + Supporting Staff.
4	Preparation of Comparative statement by MMRDA, MCGM, MPCB regarding: Recommendations by CWPRS Recommendations by IIT, Mumbai Achievements Shortcomings Reason for delay Plans for completing the shortcomings Timeline Budget	MRDPA requested the agencies to prepare presentation on above issues.	MMRDA, MCGM, MPCB	Presentation today.
5	Freezing the scope of work regarding - Service Road - Buffer Zone - Chainage wise achievement - Pending Works	MRDPA requested the agencies to prepare presentation on above issues.	MMRDA, MCGM,	Presentation today.

Sr. No.	Issues decided in the Meding	Action Taken	Imp.Jmenting Agency	Status as on 5 th February 2013
6	Measures taken as per IIT Report – Information to be obtained from MCGM, MPCB regarding dumping of solid waste in Mithi & Construction of 37 ETP	MRDPA requested the agencies to prepare presentation on above issues.	MCGM, MPCB	Presentation today.
7	Balance work from previous MRDPA and EC Meetings	Statement Prepared	MRDPA	Presentation today.
8	Preparation of progress report on set target achievement balance, time lines for completion of balance work, - budgetary provision - deepening - rock cutting - widening - retaining wall - service road - buffer zone - beautification	MRDPA requested the agencies to prepare presentation on above issues	MMRDA, MCGM,	Presentation today.
9	Removal of encroachment and R&R status	MRDPA requested deputy Collector and R&R	Dy. Collector, Mumbai Suburbs.	Presentation Today
10	Annual desilting of MMRDA portion of Mithi River to be done by MCGM	MMRDA requested MCGM	MMRDA & MCGM	Works have been transferred from MMRDA to MCGM

SITE VIST - ATR

Sr. No	Issues decided in the Site Visit	Action Taken	Implementing Agency	Status as on 5 th February 2013
11	Restoration of Paver Blocks in garden opposite Jetwan along Mithi River and regular clean ups.	Informed MMRDA	MMRDA	MMRDA to brief.
12	Completion of widening work by MCGM on down stream of Kranti Nagar Bridge.	Informed MCGM	MCGM	MCGM to brief
13	Removal of Encroachment behind taximen society and shifting of pylons from Mithi River width	Informed MMRDA	MMRDA	MMRDA to brief