Superintending Engineer
Dam Safety Organisation
Dindori Road, Nashik-422004.
Phone (Off.): 0253 – 2530030.
Fax: 0253 – 2530030.
E-mail: se.damsafety@gmail.com

सत्यमेव जयते

महाराष्ट्र शासन,

जलसंपदा विभाग

Government Of Maharashtra
Water Resources Department

अधीक्षक अभियंता,
धरण सुरक्षितता संघटना,
दिंडोरी मार्ग, नाशिक - ४२२ ००४.
दूरध्वनी (ऑ.): ०२५३ - २५३००३०
फॅक्स : ०२५३ - २५३००३०.
ई-मेल : se.damsafety@gmail.com

जा.क्र.धसुविक्र.१/ध.स्थि.अ.(पु).२०२१-२२ /२५१/२०२२ दिनांक : १० /११/२०२२

ई मेल व्दारे

प्रति,

मा. कार्यकारी संचालक,
विदर्भ पाटबंधारे विकास महामंडळ,
नागपूर

विषय :- धरण स्थिती अहवाल २०२१-२२ (अमरावती प्रदेश)

संदर्भ :- १) शासन, पाटबंधारे विभागाचे पत्र क्र .पा .वि.१०७७ / २४०२/ १८६७/२ दिनांक- १९/०२/१९८२
२) शासन ,जलसंपदा विभागाचे पत्र क्र. संकीर्ण २०१४ /(२२०/२०१४)/सिं.व्य. (कामे) दि. ९/१०/२०१५

संदर्भिय शासन पत्र क्र. १ अन्वये आपले अधिनस्त अधीक्षक अभियंता व कार्यकारी अभियंत्याकडून या कार्यालयास प्राप्त झालेल्या अमरावती विभागातील पर्जन्य पूर्व व पर्जन्योत्तर २०२१ धरण निरिक्षण अहवालांची छाननी तसेच धरण सुरक्षितता संघटनेकडुन करण्यात आलेल्या Test Inspection नुसार सन २०२१-२२ वर्षाचा धरण स्थिती अहवाल संदर्भ पत्र क्र. २ अन्वये प्राप्त निर्देशा नुसार मा. महासंचालक, संप्रजसंवसु, मेरी, नाशिक यांचेकडुन प्रकाशीत करण्यात आलेला आहे.

मा. महासंचालक, संप्रजसंवसु, मेरी, नाशिक यांचे निर्देशानुसार

१) उपरोक्त प्रकाशीत धरण स्थिती अहवालातील प्रस्तावनेच्या अनुषंगाने मुद्देनिहाय अनुपालन अहवाल या कार्यालयास पाठविण्याचे निर्देश संबंधित अधीक्षक अभियंता यांना आपल्या स्तरावरुन देण्यात यावेत ही विनंती.

२) सदरचा अहवाल दरवर्षी एप्रिल महिन्यात प्रकाशीत करण्यासंबंधी धरण सुरक्षा देखरेख संचालनालय, केंद्रिय जल आयोग, नवी दिल्ली यांचे निर्देश आहेत. तथापि संबंधित अधीक्षक अभियंता व कार्यकारी अभियंता यांच्याकडुन पर्जन्य पुर्व व पर्जन्योत्तर पाहणी अहवाल तसेच अधीक्षक अभियंता मार्फत प्राप्त होणारे त्रुटी पुर्तता अहवाल विहीत कालावधीत प्राप्त होत नसल्याने सदरचा धरण स्थिती अहवाल प्रकाशीत करण्यास विलंब झालेला आहे. यास्तव पाहणी व त्रुटी पुर्तता अहवाल विहीत कालावधीत पाठविण्यात यावेत. याबाबत आपल्या स्तरावरुन संबंधित अधीक्षक अभियंता यांना निर्देश देण्याची विनंती आहे.

३) महामंडळ स्तरावरुन त्रुटी दूर करण्यासाठी आवश्यक निधी उपलब्ध करुन देण्याची व आवश्यकतेनुरुप सनियंत्रण करण्याची विनंती आहे. जेणेकरुन धरण सुरक्षित ठेवण्यास मदत होईल.

४) शासन निर्णय संकीर्ण. २०१६ (८८/१६)) / आयएम (डब्ल्यू) दि.९/५/२०१६, नुसार पुढील कार्यवाही करण्यात यावी हि विनंती.

५) धरण तपासणी अहवालातील त्रुटीचा पुर्तता अहवाल व पर्जन्य पुर्व व पर्जन्योत्तर पाहणी अहवाल विहीत कालावधीत धरण सुरक्षितता संघटना, नाशिक येथे प्राप्त होणेच्या अनुषंगाने संबंधित अधीक्षक अभियंता (वर्ग-१ धरणांसाठी) व कार्यकारी अभियंता (वर्ग-२ धरणांसाठी) यांना आपल्या स्तरावरुन कळविण्यात यावे ही विनंती.

६) ***अमरावती विभागाचा एकत्रित धरणस्थिती अहवाल -२०२१-२२ चे अवलोकन केले असता वर्ग-२ धरणांचे ०४ पावसाळा पूर्व २०२१ व तसेच वर्ग-१ धरणांचे ०१व वर्ग-२ धरणांचे 39 पावसाळोत्तर २०२१ धरण निरिक्षण अहवाल प्राप्त झाले नाहीत.***

७) मा. महासंचालक मेरी, नाशिक यांचे वर्ग-१ व वर्ग-२ धरणांचे पावसाळा पुर्व व पावसाळोत्तर तपासणी अहवालासोबत धरणांवरील विशेष त्रुटीबाबतचे प्रपत्र (संदर्भ परिच्छेद क्र. १.११) तांत्रिक परिपत्रक जा. क्र. सं.प्र.ज.सं व सु/प अ सं सं/प्रशा/अधि/८८/सन २०२०, दि. २१/७/२०२० सादर करण्याबाबत सर्व संबंधीतांना आपले स्तरावर सूचना देण्यात याव्यात ही विनंती.

8) दि. 30/12/2021 पासुन संपुर्ण देशात धरण सुरक्षा कायदा-2021 लागू करण्यात आला आहे. सदर कायदयाच्या पार्श्वभूमिवर राज्यातील वर्ग-1 व वर्ग-2 धरणांचे पावसाळापुर्व व पावसाळोत्तर तपासणी अहवाल व त्रुटीचा पुर्तता अहवाल वेळेत सादर करण्याचे निर्देश संबंधित अधीक्षक अभियंता यांना आपल्या स्तरावरुन देण्यात यावेत ही विनंती. जेणेकरुन अमरावती विभागाचा एकत्रित धरणस्थिती अहवाल वेळेत प्रकाशित करणे सोयीचे होईल.

हे आपले माहितीस्तव व पुढील कार्यवाहीसाठी सविनय सादर.

सहपत्र : धरण स्थिती अहवाल २०२१-२२ (अमरावती प्रदेश)

(म. श. आमले)
अधीक्षक अभियंता,
राज्य धरण सुरक्षितता संघटना,
नाशिक

प्रत- सचिव (जसंव्य व लाक्षेवि), जलसंपदा विभाग, मंत्रालय, मुंबई-३२ यांना अहवालासह माहितीस्तव सविनय सादर.
प्रत- महासंचालक, संकल्पन, प्रशिक्षण, जलविज्ञान, संशोधन व सुरक्षितता, मेरी, नासिक यांना अहवालासह माहितीस्तव सविनय सादर.
प्रत- कार्यकारी संचालक, विदर्भ पाटबंधारे विकास महामंडळ, नागपूर यांना अहवालासह माहितीकरीता सविनय सादर.
प्रत- मुख्य अभियंता, नियोजन व जलविज्ञान, नाशिक यांना अहवालासह माहितीकरीता सादर.
प्रत- मुख्य अभियंता, यांत्रिकी (जलसंपदा विभाग), नाशिक यांना माहितीस्तव अहवालासह सादर.
प्रत- मुख्य अभियंता , (वि.प्र.) जलसंपदा विभाग,सिंचनभवन, अप्पर वर्धा कॉलनी, शिवाजीनगर, अमरावती यांना अहवालासह माहितीस्तव सादर.
प्रत - मुख्य अभियंता , जलसंपदा विभाग, सिंचनभवन, अप्पर वर्धा कॉलनी, शिवाजीनगर, अमरावती यांना अहवालासह माहितीस्तव सादर.

प्रत,

१. अधीक्षक अभियंता, अकोला पाटबंधारे मंडळ, अकोला
२. अधीक्षक अभियंता, वाशिम पाटबंधारे मंडळ, वाशिम
३. अधीक्षक अभियंता, अमरावती पाटबंधारे प्रकल्प मंडळ, अमरावती
४. अधीक्षक अभियंता, यवतमाळ पाटबंधारे मंडळ यवतमाळ
५. अधीक्षक अभियंता, यवतमाळ पाटबंधारे मंडळ (व्यवस्थापन), यवतमाळ
६. अधीक्षक अभियंता, उर्ध्व वर्धा पाटबंधारे मंडळ, अमरावती
७. अधीक्षक अभियंता, बुलडाणा पाटबंधारे प्रकल्प मंडळ, बुलडाणा
८. अधीक्षक अभियंता, महाराष्ट्र जीवन प्राधिकरण मंडळ, अमरावती
९. अधीक्षक अभियंता, यांत्रिकी मंडळ, , नाशिक

यांना माहितीस्तव व पुढील योग्य त्या कार्यवाहीस्तव अहवालासह सस्नेह अग्रेषित.

२/- कृपया वरील अहवालाची प्रत मिळाल्याची पोहच या कार्यालयास पाठवावी हि विनंती.

प्रत,

१. कार्यकारी अभियंता, बुलडाणा पाटबंधारे विभाग, बुलडाणा
२. कार्यकारी अभियंता, अकोला पाटबंधारे विभाग, अकोला
३. कार्यकारी अभियंता,यवतमाळ पाटबंधारे विभाग,यवतमाळ
४. कार्यकारी अभियंता, लघु पाटबंधारे विभाग ,अकोला
५. कार्यकारी अभियंता, वाशिम पाटबंधारे विभाग , वाशिम
६. कार्यकारी अभियंता, लघु पाटबंधारे विभाग, (बांधकाम),वाशिम
७. कार्यकारी अभियंता, लघु पाटबंधारे विभाग, कारंजा लाड.जि.वाशिम
८. कार्यकारी अभियंता,यवतमाळ प्रकल्प बांधकाम विभाग,यवतमाळ
९. कार्यकारी अभियंता, उर्ध्व वर्धा, अप्पर विभाग, अमरावती

१२.कार्यकारी अभियंता, पाटबंधारे प्रकल्प व जलसंपत्ती अन्वेषण विभाग, अमरावती
१३. कार्यकारी अभियंता, लघु पाटबंधारे विभाग , बुलडाणा
१४. कार्यकारी अभियंता, अरुणावती प्रकल्प विभाग,दिग्रस जि.यवतमाळ
१५. कार्यकारी अभियंता, बेंबळा प्रकल्प विभाग,यवतमाळ
१६. कार्यकारी अभियंता,लघु पाटबंधारे विभाग,पुसद जि.यवतमाळ
१७. कार्यकारी अभियंता, मध्यम व लघु पाटबंधारे प्रकल्प विभाग, अचलपूर जि. अमरावती
१८. कार्यकारी अभियंता, महाराष्ट्र जीवन प्राधिकरण व्यवस्थापन विभाग ,यवतमाळ

दोष व त्रुटी बद्दल त्वरीत कार्यवाही करुन अनुपालन / पुर्तता अहवाल संबंधित मंडळ कार्यालयामार्फत धरण सुरक्षितता संघटना, नाशिक येथे त्वरित पाठवावे.

२/- सदर अहवालाची प्रत ई-मेल व्दारे पाठविण्यात आलेली आहे.

प्रत - कार्यकारी अभियंता, धरण सुरक्षा विभाग क्र .३, नाशिक ४
२/- यांना ग्रंथालयात संग्रहासाठी.

प्रत - ग्रंथालय, मध्यवर्ती संकल्पचित्र संघटना, नाशिक यांना अहवालाच्या प्रतीसह माहितीसाठी.

लक्षवेध –

मुख्य अभियंता,जलविज्ञान व धरण सुरक्षितता, नाशिक यांचे पत्र जा.क्र.मु.अ./जवध.स./धसुसं/धसुविक्र.२/ १२६२/२०२२ दि. २८/९/२०२२ चे अवलोकन व्हावे व सदर त्रुटी बाबत कार्यकारी अभियंता यवतमाळ पाटबंधारे विभाग, यवतमाळ यांचा अहवाल राज्य धरण सुरक्षितता संघटना, नाशिक यांस देण्यात यावा, हि विनंती.

(For Office Use Only)

सत्यमेव जयते

Government of Maharashtra
Water Resources Department

Annual Dam Health Status Report
2021-22
Amravati Region

Superintending Engineer
Dam Safety Organisation
Nashik

Chief Engineer
Hydrology & Dam Safety
Nashik

Director General
Design, Training, Hydrology, Research and Safety,
MERI, Nashik

DRAFT FOREWORD

1.0 Annual Dam Health Status Report (ADHSR) 2021-22 of Class-I &Class-II Dams in Amravati Region is prepared based on the Inspection Reports (Pre and Post Monsoon 2021) received from field offices and test inspections carried out by Dam Safety Organisation (DSO), Nashik during Year 2021-22.The period of the report is from April 2021 to March 2022.

2.0 This Report comprises of following Parts.

Part	Description
Part-1	General Information
Part-2	Action Taken Report (ATR)
Part-3	Annual Dam Health Status Report (ADHSR) of Pre & Post Monsoon 2021
Part-4	Annual Performance Report of Dam Instruments
Part-5	Annual Performance Report of Meteorological Instruments
Part-6	National Committee on Dam Safety (NCDS) Documents
Part-7	Dam Health and Rehabilitation Monitoring Application (DHARMA)
Part-8	Health Status of Gated Dam (As per Mechanical Organisation)

Part-1 & Part-6 to 8 are envisaged by DSO, Nashik & Part-2 to5 are in the format provided by Dam Safety Monitoring Directorate, Central Water Commission, New Delhi vide letter No. 3/19/NCDS/HS/DSM/2001/627-56 Dated 28/08/2002.

2.1 Part-1:Covers General Information viz. Time schedule of Inspection, Classification of Dams, Inspection Authorities, Preparation of ADHSR for Class-I & Class-II Dams, Categorization and Standardization of Deficiencies, NRLD updation, which will be helpful to field officers. Inspecting officers are requested to follow the suggestion given in 'Part-1' while carrying out forthcoming Pre/Post Monsoon inspections of dams.

2.2 Part-2: Covers Action Taken Report (ATR) on Deficiencies pointed out in last Year ADHSR 2020-21& Status of poor efforts taken by field office.

2.3 Part-3: Covers condensed summary of Dam deficiencies noticed during inspection carried out by field officer and Dam safety Organisation in the Year 2021-22**.**

2.4 Part-4: Covers details of Instrumentation provided in or on Dams & its Functionality. Prepared by Instrumentation and Research Division, Nashik.

2.5 Part-5: Covers details of Metrological Instrumentation provided at Dam Site & its Functionality. Prepared by Instrumentation and Research Division, Nashik.

2.6 Part-6: Covers status of Documents (EAP, ROS & GOS, Data Book, O & M Manual, Record Drawing, Completion Report) recommended by National Committee on Dam Safety.

2.7 Part-7: Covers Progress of updation of Dam Information filled in DHARMA Web Portal.

2.8 Part-8: Covers status of Action Taken Report on Deficiencies pointed out in ADHSR- 2020-21&Deficiencies observed in ADHSR- 2021 of Mechanical Organisation for Gated Dams.

3.0 This report covers Dam Health Status of 26Class-I &158 Class-II Dams owned by WRD and Also covers 2 Class-I &2 Class-II Private Owned Dams inspected by DSO twice in the year.

4.0. There are total 188 Dams in this Region. Out of 376 expected Inspection Reports, this ADHSR is based on 328Inspection Reports received in DSO, Nashik.

Status of Receipt of Inspection Report2020-21

(Ref. Table- 3.1 & 3.3)

Dam Owner	Expected Inspection Report in DSO			Inspection Report Received in DSO			Inspection Report Not Received in DSO		
	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total
WRD	52	316	368	51	273	324	01	43	44
Private	04	04	08	02	02	04	02	02	04
Total	56	320	376	53	275	328	03	45	48

Dams having Deficiencies

(Ref. Table- 3.6)

Dam owner	Year	No. of Dams								
		Class of Dam		Total	Class-I dams having Deficiencies			Class-II dams having Deficiencies		
		I	II		Cat-I	Cat-II	Cat-III	Cat-I	Cat-II	Cat-III
W.R.D	2020-21	23	193	216	00	09	23	00	39	193
	2021-22	26	158	184	00	09	26	00	40	158
Private	2020-21	00	02	02	00	00	00	00	02	02
	2021-22	02	02	04	00	00	02	00	02	02
Total	2020-21	23	195	218	00	09	23	00	41	180
	2021-22	28	160	188	00	09	28	00	42	160

Category wise Deficiencies

(Ref. Table- 3.7)

Dam owner	Year	No. of Deficiencies								
		Category–1			Category-2			Category-3		
		Class		Total	Class		Total	Class		Total
		I	II		I	II		I	II	
W.R.D	2020-21	00	00	00	27	129	156	193	787	980
	2021-22	00	00	00	27	114	141	276	881	1157
Private	2020-21	00	00	00	00	07	07	00	17	17
	2021-22	00	00	00	00	07	07	16	17	33
Total	2020-21	00	00	00	27	136	163	193	804	997
	2021-22	00	00	00	27	121	148	292	898	1190

Deficiencies in Gated Dams (Class-I)(As per Mechanical Organization)

(Ref. Table- 8.1)

Dam owner	Year	Number of Gated Dams	No. of dams inspected	Number of Deficiencies		
				Category		
				Category-1	Category-2	Category-3
W.R.D	2020-21	17	17	00	101	967
	2021-22	17	17	00	189	1089
Private	2020-21	00	00	00	00	00
	2021-22	02	02	00	12	115
Total	2020-21	17	17	00	101	967
	2021-22	19	19	00	201	1204

5.0: The responsibility of Health and Safety Monitoring of Class-III dams lies with the respective Chief Engineers. Hence for Class-III Dams based on periodical inspection reports, Annual Dam Health Status Report should be prepared & published by concerned Field Chief Engineers with submission to Government & forwarded to DSO, Nashik for record.

6.0: The deficiencies shown in the present report are based on the Pre/ Post Monsoon Inspections of the Dams carried out by the field officers and reports of them received by this organization. As such, the deficiencies and action taken thereof is the sole responsibility of the field officers.

7.0 Conclusions :

Government Owned Class-I Dams :

7.01 : Category-1 Deficiency is Not noticed in all 26 Dams.
7.02 : 27 No. of Category-2 Deficiencies in 9 out of total 26 No. of Dams are noticed.
7.03 : 292 No. of Category-3 Deficiencies in total 26 Dams are noticed.
*7.04**:** Out of ATR expected for 27 No. of Category-2 Deficiencies, field action for removal of Deficiencies is noticed for 0 Deficiencies only.*

Government Owned Class-II Dams :

7.05: Category-1 Deficiency is Not noticed in all 158 Dams.
7.06:114 No. of Category-2 Deficiencies in 40 out of total 158 No. of Dams are noticed.
7.07:881 No. of Category-3 Deficiencies in total 158 Dams are noticed.
7.08:Out of ATR expected for 129 No. of Category-2 Deficiencies, field action for removal of Deficiencies is noticed for 02 Deficiencies only.

Private Owned Class-I Dams : No Class-I Private dam in this region.
7.09: Category-1 Deficiency is Not noticed in 02Dam.
7.10 :0 No. of Category-2 Deficiencies in 02Dam are noticed.
7.11 :16 No. of Category-3 Deficiencies in 02Dam are noticed.
7.12:Out of ATR expected for 0 No. of Category-2 Deficiencies, No field action is noticed for removal of Deficiencies.

Private Owned Class-II Dams :

7.13:Category-1 Deficiency is Not noticed in all 2 Dams.
7.14 :7 No. of Category-2 Deficiencies in total 2 Dams are noticed.
7.15 : 17 No. of Category-3 Deficiencies in total 2 Dams are noticed.
*7.16 **:** Out of ATR expected for 17 No. of Category-2 Deficiencies, No field action is noticed for removal of Deficiencies.*

8. Points of Attention:

8.01: It is mandatory that Pre Monsoon Inspection Report must be submitted to DSO, Nashik by 30th June & Post Monsoon Inspection Report must be submitted to DSO, Nashik by 31st December every Year.

8.02: As per Dam Safety Monitoring Directorate, Central Water Commission, New Delhi Annual Dam Health Status Report (ADHSR) must be submitted in the month April every Year.

8.03: It is pointed out that only 147 (39.94 %) Pre & Post Monsoon Reports out of 368 Pre& Post Monsoon Reports are received in stipulated period.177 (48.1 %) Pre & Post Monsoon Reports are received out of 368 Pre & Post Monsoon Reports after rigorous follow up by DSO officials &44 (11.96 %) reports out of 368 Pre &Post Monsoon Reports were not received at all. All field officers & Higher Authorities shall take serious note of this in light of enactment of Dam Safety Act 2021.

8.04: ATR expected for 50 No. of Dams (163 Cat-2 Deficiencies). However ATR was received for 43No. (141Cat-2 Deficiencies) of Dams i.e. only 1.14% of Cat-2 Deficiencies fully addressed.

8.05:Concerned Chief Engineer should monitor and instruct field Superintending Engineer & Executive Engineer regarding submission of ATR to DSO, Nashik to reflect exact status of Dam Safety works.

8.06: The Chief Engineers should compel all Superintending Engineer & Executive Engineer of concerned Dams to carry out periodic inspections and submit report to D.S.O. in time. Brain storming of field officer regarding Dam Safety aspect is must otherwise the whole exercise done by Dam Safety Organisation tends to become futile.

8.07: In case of Mechanical Organisation inspections, Out of ATR expected for 201No. of Category-2 Deficiencies, However only 00no.of Category-2 deficiencies were fully addressed.

8.08: Earthen dam uprooting of trees & shrubs grown on embankment of Dam follow CWC guidelines for safety of dams 2018. [Page 54/90]

8.09: Review of a need for painting of Gates & structural parts to avoid further deterioration in consultation with Mechanical orgnisation.

8.10: Being the dam owner, safety of the dam is the prime responsibility of the concerned field Executive Engineer. In order to ensure safety of dam/dams in his jurisdiction, he shall initiate The procedures for removal of deficiencies noticed in the Pre-Post Monsoon Inspection as well as pointed out in this ADHSR by following due procedure of approval.

8.10: Higher authorities i.e. Superintending Engineer and Chief Engineer shall accord timely sanction to most economical and sustainable technical work required for Deficiency removal.

8.11: Executive Director of the corporation are requested to make required funds available to the Deficiency removal and monitor the progress periodically. This will help in keeping the Dam safe.

8.12: Executive Director, Vidarbha Irrigation Development Corporation are requested to make required funds available to the Deficiency removal and monitor the progress periodically. This will help in keeping the Dam safe.

8.13: Hence, It is expected that Superintending Engineers should verify whether Works of removal of Deficiencies are proposed to address Deficiencies pointed in ADHSR while approving Procurement List of the M & R works of the Project.

8.14: Gist of report is that though inspection of Dams are carried out &Reports are published however status of ATR depict that despite of M&R expenditure extreme poor performance of removal deficiency is observed. Field officers should take serious note of this.

8.15: Central Government has enacted Dam Safety Act 2021 from date 30/12/2021 to provide for surveillance, Inspection, Operation & Maintenance of the specified dam for prevention of dam failure disaster & to provide for institutional mechanism to ensure their safe functioning & for matters connected therewith or incidental thereto So that Dam owner shall give specific attention for implementation of Dam Safety Act 2021.

I hope this report will serve desired expectations expressed by Dam Safety Monitoring Directorate of C.W.C. New Delhi. Any error, discrepancies omissions if any may please kindly by brought to the notice. So that it can be taken into consideration in the next report.

The efforts taken by the Superintending Engineer, Dam Safety Organisation, Nashik and his team, for completion of this report are highly appreciated.

Place: Nashik
Date:

(R R Shah)
Director General
Design, Training, Hydrology, Research and Safety
MERI, Nashik

INDEX

Part-1

General Information

Part-1 General

1.01 Introduction :

As per National Register of Large Dam (NRLD) published by CWC, New Delhi, Maharashtra has the distinction of having largest numbers of dams in the country.

A separate Organisation called Dam Safety Inspectorate, Nashik was functioning in the State since 20/10/1980. Its status is upgraded as Dam Safety Organisation, Nashik from 01/05/1985. The organization consists of a circle level unit headed by Superintending Engineer under which Executive Engineer, Dam Safety Division No.2, Nashik looks after Amravati Region.

1.02 Inspection of Dams :

The Government of Maharashtra has delegated powers of Pre and Post Monsoon Inspection to competent authority for Pre and Post Monsoon Inspection of the Dams vide G.R Dtd.23/08/1998.

Dam Safety Organization, Nashik carries out scrutiny of the inspection reports received from field offices for Class-I & II Dams. Significant & Serious deficiencies observed during scrutiny are immediately intimated to Field Offices to carry out Remedial Measures.

The "Annual Dam Inspection Programme" is sanctioned by Director General, DTHRS MERI Nashik. Test inspections are carried out by Dam Safety Organization as a third party inspection to crosscheck the inspections carried out by Field Offices.

Amravati Region comprising 319 Government owned Completed Dams (includes 1 Century old Dams) & 04 private Dams

DSO, Nashik monitors all Government Dams from safety point of view. In addition to this DSO, Nashik carried out detailed inspections of 04 Private Dams owned by Maha Genco Paras TPS, Akola & Maharashtra Jevan Pradhikaran, Yavatmal on Consultancy basis.

1.03 District wise and class wise break up of number of Dams :

District	Large Dam Class- I	Large Dam Class- II	Large Dam Class- III	Grand Total
BULDANA	07	30	29	66
AKOLA	05	12	17	34
WASHIM	01	41	40	82
AMRAVATI	09	25	19	53
YAVATMAL	04	50	30	84
TOTAL	26	158	135	319
PRIVATE (AKOLA, YAVATMAL)	02	02	--	04
GRAND TOTAL	28	160	135	323

1.04 Time Schedule of Inspections :

The Government of Maharashtra has designed systematic approach for monitoring each and every dam. The periodical inspection of dams must be completed as per following schedule.

Type of Inspection	Last dates for	
	Completion of Inspection	Sending of Inspection reports to concerned authorities.
(1) Pre Monsoon	15th May	30th June
(2) Post Monsoon	30th November	31st December
(3) Special inspection before the first filling (Report need not be sent to Dam safety Organization)	30th April	31st May
(4) Special inspection after the first filling	Within one week after the lake attains the intended storage level.	Within one week from the date of inspection.
(5) Special inspection after a severe distressing event or accident or incident.	Immediately after the event is noted.	Within one week form the date of inspection?

1.05 Classification of Dams :

The dams are categorized into three types based on their component and features as below.

SR No	Type of Dam	Height from general level of deepest foundation in m.	Impounded gross storage capacity Up to FRL in M Cum	Spillway capacity	Type of spillway
1	2	3	4	5	6
1	Class-I Dam	Above 30 m	Above 60 M Cum	Above 3,000 Cumecs	Gated Spillway
2	Class-II Dam	15 m to 30 m	15 M Cum upto 60 MCum	2,000 to 3,000 Cumecs	Ungated Spillway
3	Class-III Dam	10 m.to15m	1.0 M Cum upto 15 MCum	2,000 to 3,000 Cumecs	Ungated Spillway

Note :

1) All dams more than 15 meters in height will be classified under "Large Dam"
Irrespective of other parameters.

2) All dams less than 10 meters in height will be classified as "Small Dam" irrespective of other parameters.

3) In order to determine the exact category of "Large Dam" following procedure shall be followed. The category of dam as per (I) Height (II) Storage Capacity & (III) Spillway Capacity shall be worked out individually. The highest of category shall be appropriate category of dam

4) Apart from above following additional parameters shall be considered for deciding the category of the dams between 10 to 15 m. in height.

a) Dams having length of crest more than 2000 m. OR

b) Dams having specially difficult foundation problems OR

c) Dams with unusual design shall be classified under "Large Dams (Class-II)"

d) Dams having length of crest more than 500 meters but less than 2000 meters Shall be classified as "Large Dams (Class-III)"

1.06 Field Inspection Authorities :

The designated inspection authority for periodical inspection of dam depending upon the classification of type of dam is as below

Sr. No.	Type of Dam	Inspection authority	Inspection Reports to be sent to	Test Inspection
1	2	7	8	9
1	Class-I Dam	Superintending Engineer/ Administrator	1) Chief Engineer 2) Superintending Engineer Dam Safety Organization.	Test Inspection by the Regional Chief Engineer/ Chief Administrator for the dams having height more than 60 m or storage capacity more than 1000 MCum or spillway capacity 10000 Cumecs or more
2	Class-II Dam	Executive Engineer	1) Superintending Engineer/ Administrator 2) Superintending Engineer, Dam safety Organization	
3	Class-III Dam	Deputy Engineer	1)Superintending Engineer/ Administrator 2) Executive Engineer	

1.07 Preparation Of Annual Dam Health Status Reports Of Class-I & class-II Dams :

Dam safety Organization carried out scrutiny of the periodical inspection reports of Class-I & Class-II dams received from field offices and significant deficiencies are immediately communicated to concern authorities to carry out remedial measures.

Based on all periodical inspection reports from Field Offices and Test Inspections carried out by DSO, Nashik, Region wise Annual Dam Health Status Report is published by DG, DTHRS, MERI, Nashik and submitted to Government, CWC and circulated to all concerned Field Offices.

1.08 Preparation of Annual Dam Health Status Report of Class-III Dams :

The responsibility of Health and Safety Monitoring of Class-III dams lies with the respective Chief Engineer. Hence for Class-III Dams based on periodical inspection reports, Annual Health Status Report of Class-III dams should be prepared by concern Field Chief Engineers and forwarded to DSO, Nashik for record.

1.09 Guidelines Regarding Preparation of Annual Dam Health Status Report :

ADHSR is prepared in DSO, Nashik as per Central Water Commission New Delhi's guidelines received vide letter Dtd. 28/08/2002. As per this letter it is intimated that all States / Organizations should submit the Annual Dam Health Status Report (ADHSR) in the month of 'April' every year.

1.09.1 Categorization of Deficiencies

The deficiencies observed are categorized as per CWC, New Delhi's letter Dtd. 28/08/2002 as below

Category	Action to be taken
Category-1	Dams with Major deficiencies which may lead to dam failure.
Category-2	Dams with Major rectifiable deficiencies needing immediate attention.
Category-3	Dams having Minor/ No deficiencies.

For further detailing of deficiencies based on the nature and priority of deficiency, DSO, Nashik has standardized all the three types of deficiencies.
These standardized deficiencies are as follows

1.09.2 Category-1 Standard Deficiencies :

Sr. No.	Deficiencies	Category identifier
1 E -	**Earthen Dam.**	
1	Seepage water has created an open pathway or pipe through dam, which may lead to failure of dam by piping.	1E.1
2	Heavy seepage with muddy or turbid water is observed through any part of dam.	1E.2
3	Seepage water flooding from a boil in the foundation or from relief well on downstream side of dam.	1E.3
4	Outlet well / Head regulator well and hoisting structure is collapsed/completely damaged.	1E.4
5	Outlet pipe in the body of the dam is damaged/failed and uncontrolled outlet-releases eroding Toe of dam.	1E.5
6	Debris stuck under gate or gate leaf is cracked / failed resulting uncontrolled flow through outlet.	1E.6
1 M	**Masonry Dam**	
1	Downstream movement or tilting of dam.	1M.1
2	Differential movement of dam blocks/monoliths.	1M.2
3	Vertical Displacement with visible cracking in the body of dam.	1M.3
4	Spillway gate damaged / not working.	1M.4

1.09.3 Category-2 Standard Deficiencies :

Deficiency Cat II (A)	Deficiency Cat II (B)
Earthen Dam	
A.1: Boil/leakage/ seepage/ wet patches/ slushiness in Earthen Dam.	**B 1:** Dam section is not as per design
A 2: Standing pool / Ponding / Water Logging / Slushy condition on D/S of Dam	**B 2:** Cross and toe drains not working properly/ drains silted or vegetated causing stagnant pool of water.
A 3 : Leakages in vicinity of junction between earthen dam & masonry dam portion.	**B 3:** Considerable settlement of embankment / Rock toe/Pitching/ U/S & D/S slops, bulging/concavity of slopes.
A 4 : Major leakages through outlet conduit/pipe joints/Gates.	**B 4**: Longitudinal / Transverse cracks/ low area/sink holes/gully formation on top side slope of earthen dam.
A 5 ; Relief wells not functioning properly./ Abnormal rise in water level in wells.	**B 5:** Outlet gates not functioning properly. Stem rod is bent(Service gate/Emergency gate/Stop log gate/sluice gate)
A 6 : Outlet well is damaged/not in good condition /cracks observed/jets of water in well.	**B 6:** Approach to dam through all weather road not constructed/maintained properly.
A 7 : Retrogression /scouring in tail channel.	**B 7:** Waste weir/waste weir bar not in good condition/coping damaged/leakage through waste weir.
Masonry / Concrete Dam	
A 8 : Drainage gallery inaccessible/No adequate lighting./ No dewatering arrangement or failure.	**B 8:** Pointing on U/S face of dam not in good condition./deterioration spalling of concrete surface.
A 9 : Foundation drains / holes/ porous pipes/chocked/ no seepage through foundation drain holes.	**B 9:** Instruments not in working condition.
A 10 : Heavy leakages through porous pipes/ through dam body in gallery /monolith joints.	**B 10:** Leakages through River sluice.
A 11 : Sweating / seepages through D/S of masonry dam	
A 12 : Excessive considerable leaching from seepage water.	
A 13 : Swelling / minor cracking observed on body of dam.	
A 14 : EDA / Stilling basin damaged/Hydraulic performance not good.	
A 15 : Leakages through spillway /piers//junction of flank wall.	
A 16: Damages / foundation erosion/ scour/undermining observed in vicinity of flank walls/ guide walls/ junction walls/return walls.	
A 17 :End weir not in good condition / scouring noticed on immediate D/S.	
Spillway gates	

Deficiency Cat II (A)	Deficiency Cat II (B)
A 18 :Wire ropes of hoist not in good condition/hoisting structure damaged/cracked.	**B 11**: Surface paint/steel surface of spillway gates deteriorated.
A 19 : Alternative power system Generator for gate operation not working properly.	**B 12** : Damage to Rubber seals/ considerable Leakages through gates.
A 20 : Operation of gates not smooth needs repair.	
Other structures	
	B 13 : Heavy vegetation/big trees on embankment top/slope making dam portion not accessible.
	B 14 : Deck bridge slab/ pier / damaged cracked/ alignment disturbed.
	B 15 :Major portion of Pitching damaged/washed away.

1.09.4 Category-3 Standard Deficiencies :

Sr. No.	Deficiencies	Category identifier
1	Profuse growth of bushes and trees over dam portion.	3.1
2	Guard stones/ chainage stones and parapet wall not provided /damaged.	3.2
3	Growth of aquatic weeds in reservoir of dam is observed.	3.3
4	Ant hills or crab holes/holes made by rodents/animals**.**	3.4
5	Minor undulation/ settlement/slightly less top width/ Rain cuts / pot holes observed on dam top & slopes.	3.5
6	Access road/Dam top road surface/ slab joints damaged needs repair.	3.6
7	Pitching on embankment of dam is dislocated /disturbed at some places.	3.7
8	Breaching section is not accessible/ Instruction board showing operation of breaching section is not available.	3.8
9	Section of Toe drain/cross drain/ out fall drain/rock toe damaged at some places. Pitching of drains disturbed. Some weed, vegetation growth/ siltation in nalla/drains. Nalla needs regradation.	3.9
10	Surface drain/ Catch water drains for berms are silted /damaged	3.10
11	Electric cable & wiring are damaged/not in good condition.	3.11
12	Minor leaching in the gallery/ body of dam.	3.12
13	V – notches/ measuring devices are not in working condition/ silted /damaged/ not provided.	3.13

Sr. No.	Deficiencies	Category identifier
14	Mosquito net door is to be provided to avoid entry of reptiles in the gallery.	3.14
15	Damage to natural slope protection works,guniting damaged/washed out. Wire mesh exposed.	3.15
16	Guide wall/Divide wall/Guide bund/End Sill wall damaged/ Pointing is not in good condition/weep holes not functioning. At some places w.w bar/coping is damaged.	3.16
17	Provision of access to stilling basin/ladder not provided.	3.17
18	EDA ponding with water not possible to Inspect.	3.18
19	Minor erosion/ Scouring/Retrogression/ pot holes in tail channel. Ponding, standing Water in EDA / Tail channel.	3.19
20	Lubrication/painting/minor repairs required for parts of Gates / hoisting Structure/Rubber seal damaged/ replacement.	3.20
21	Approach bridge to intake well / spillway gates railing /flooring plates damaged / need repairs. Need of ladder for inspection well/EDA.	3.21
22	Minor leakages through river sluice/outlet/ gates.	3.22
23	Air vent not periodically cleaned./damaged/closed.	3.23
24	EAP / ROS /GOS /Record drawings/ not provided / not prepared at dam site.	3.24
25	The record of periodical measurements of leakage discharge from dam / relief well is not maintained.	3.25
26	Street light on dam top is not provided/not working.	3.26
27	Security / CC TV camera/entry gate not provided/not working.	3.27
28	Sufficient staff arrangement is not available for security ,instrument readings and measurements and maintenance on dam site.	3.28
29	Fencing around dam is not provided/ damaged due to which unauthorized trespassers are seen.	3.29
30	Communication facilities like mobile wireless, warning devices, telephone is not available at dam site.	3.30
31	Sufficient stock of spares/stationary required is not available at dam site. Storage arrangement not provided at site.	3.31
32	Minor leakages through masonary/ concrete dam body/gallery of dam/outlet	3.32

Sr. No.	Deficiencies	Category identifier
	well.	
33	Security cabin at dam entrance/Irrigation outlets not provided/damaged/needs repair.	3.33
34	Approach channel silted.Trash rack need to be cleaned/ damaged/not provided.	3.34
35	Minor damages to spillway / masonary/ concrete portion of dam/outlet well.	3.35
36	Porous pipes/foundation drains / holes not periodically cleaned.	3.36

1.10 Special Deficiencies

Director general, DTHRS, Nashik has circulated a circular of special deficiencies dated 21/07/2020 (सं.प्रा.ज.सं.सु./म.अ.सं.सं./प्रशा/अधि/88/सन 2020) to all field offices to attend the above special deficiencies along with periodical inspection report

Statement No-1

Special Attention Deficiencies (Civil), Attached with Pre- Post monsoon Inspection Reports (Availability of Compulsory Manpower & Documents at dam Site)

Deficiency category	Deficiency
Sp-1	Whether Emergency Action Plan is kept at dam site or not ?
Sp-2	Whether Approved Reservoir Operation Schedule is kept at dam site or not ?
Sp-3	Whether Latest approved gate Operation Schedule is to be kept at dam site or not ?
Sp-4	Whether Record Drawings sets are kept at dam site / section / Sub Divn. office or not ?
Sp-5	Whether Standard Operating Procedure copy with Updated contact numbers of all concerned authorities are kept at dam site or not ?
Sp-6	Whether Chart showing location of rain gauges / river gauges on U/s catchment & approximate travel time of discharge is maintained & displayed at dam site.
Sp-7	If CCTV is established, how observations are done round the clock & who is responsible person to observe these.
Sp-8	Whether Sufficient arrangement of staff is available or not. Engineers / Operators / Electrician / Watchmen / Security etc. and also staff for instrument reading, measurement & maintenance.They may be Govt. employee or through outsourcing. This staff is especially compulsory during monsoon period.

Sp-9	Whether Communication facilities like mobile, wireless, warning devices, telephone are available at dam site, or otherwise.
Sp-10	Whether The record of periodical measurements of leakage discharge from dam / relief well etc. is maintained or not.
Sp-11	Is there any profuse growth of bushes or trees over any portion of dam ?

Statement No-2

Special Attention Deficiencies (Mech & Elect), Attached with Pre- Post monsoon Inspection Reports

(Compulsory Minimum repairs, For Spillway Gates & Gallery)

Deficiency category	Deficiency
Sp-12	Whether Wire ropes of hoist are in good condition/hoisting structure damaged/cracked ?.
Sp-13	Whether Alternative power system- Stand by two Generators for gate operation are working properly or not ?
Sp-14	Whether the **o**peration of all gates is smooth or needs repair ?.
Sp-15	Whether Lubrication/ painting/ minor repairs for parts of Spillway Gates and Hoisting structure are carried out or not ?.
Sp-16	Whether Rubber seals of gates are damaged or needs replacement ?.
Sp-17	Due date of painting of each part should be displayed on dam site as per mechanical maintenance schedule
Sp-18	Whether Electric cable / wiring / lights etc are in working condition are not ?
Sp-19	Whether gallery is having excessive leakages ?

1.11 Standard Procedure For Confirmation And Removal of Category-1 Deficiency of Dams

A systematic approach and working methodology is very essential to monitor the safety aspects of the dams.

During the scrutiny of Pre and Post Monsoon report or during DSO test Inspection whenever it is found that the deficiency is of Category-I, it will be immediately communicated to concern SE and CE.

Concerned SE /CE should immediately visit the dam and should satisfy himself that the deficiency pointed out is a major deficiency which may lead to failure of dam and should confirm to the DSO, Nashik regarding the classification of deficiency as per his opinion.

After conformation from Field Chief Engineer it will appear in ADHSR.

Remedial Measures for Category-I deficiency removal shall be undertaken immediately. And after completion of physical work of deficiency removal, Concern Chief Engineer should communicate status to DSO, Nashik immediately.

1.12 National Register of Large Dams (NRLD) :

Dams having Height above 10 meter are classified as per the norms of International Commission on Large Dams (ICOLD).

NRLD is consists of information of Large Dams as per 20 columns proforma covering information regarding salient features.

NRLD is updated in every January. Hence Field offices need to submit the information of new dams every year to DSO by December to incorporate it in NRLD. The response regarding submission of

NRLD information from field offices is very poor, it is always observed that DSO officials has to take rigorous follow up to obtain requisite information.

1.13 Point of Attention :

General	Details
Inspection details	1) The periodical inspection reports of all the dams shall be sent in original instead of carbon or xerox copy. (Signed copy shall be emailed in advance to DSO. 2) Ambiguous or incomplete replies shall be avoided. It is necessary to check point wise replies, which should clear and self explanatory. 3) The deficiencies observed frequently since long shall be deleted after verification of rectification work. 4)The inspecting officer is advised to write the word "special attention" in inspection report against all such items wherever immediate attention is necessary from concerned field officer in charge of dam from safety point of dams and life & property on the downstream & would be useful for identifying categorization of deficiencies in Dam Safety Organization, Nashik. 5) The information in Appendix II (Performance of meteorological instruments installed) and Appendix III (performance of taking observation of instruments installed in large dams) shall be filled properly and complete. 6) The compliance of rectification work of deficiencies of each dam mentioned in status report shall be communicated to Dam Safety Organization, Nashik every year so that this can be included in the Action Taken Report Part-I of status report.
Salient features	1) Due care shall be taken while filling the salient features of dam and information regarding N.C.D.S. documents. 2) Date of inspections is not mentioned in some Pre / Post Inspection Reports. This is mandatory since it will reflect in the Annual health status report.
Dam and Dam reach (Embankment)	1) If the existing dam section is found under section as compared to the design section during inspection then the work of re-sectioning shall be carried out and opinion of inspecting officer shall be stated in inspection report. 2) The extent of embankment settlement shall be furnished with its measurement & Reduced Distance (R.D.) and it shall be with compared designed cross section.
Gallery / Shaft Drainage (Concrete / Masonry)	The monolith wise quantum of leaching in galleries and all type of leakages in dam shall be noted in inspection report.
Spillway and Energy Dissipation Structure	The quantum of retrogression/scouring in tail channel shall be given in inspection report.
Hydro-Mechanical Component and Turbine/Pump	The trial of spillway gates shall be carried out before monsoon every year &observed condition shall be mentioned in inspection report.
Instrumentation	It is observed that the information regarding number of instruments installed does not tally for pre & post monsoon inspection report of the same dam. In some cases it is observed that the list of instruments given in previous year do not appears in the current year. These discrepancies should be avoided.

Part-2

Action Taken Report

Part-2: Action Taken Report

2.1 General:

Annual Dam Health Status Reports (ADHSR) of Dams for Year 2020-21 was published by Director General, DTHRS, MERI, Nashik in June 2021 and submitted to Govt. of Maharashtra and also circulated to all Field Offices ranging from Divisions to Corporations for information and carrying out remedial measures.

It is expected that Field Officers should go through the Status Report scrupulously and attend remedial measures on priority basis and submit Action Taken Report (ATR) for reflecting necessary repairs & attention given for maintaining safety of Dams in the ADHSR.

2.2 ATR Submitted by Field Offices:

In this region there are Government owned 23 Class-I & 193 Class-II Dams & Private owned 2 Class-II dams.

As per ADHSR 2020-21 Action Taken Report was expected from Government owned 09 Class-I Dams & 39 Class-II Dams & private owned 02 Class-II Dam.

However Action Taken Report were received from Government owned 09 Class-I Dams & 34 Class-II Dams. No Action taken report was received from private class-II dam.[Ref. Table 2.1,2.2 & 2.3]

2.3 Action Taken Report of Class-I & Class-II Dams (Government & Private owned)

	Category	Total Dam				ATR received				Physically fully completed						Physically partly completed					
	Class	I		II		I		II		I		II		%		I		II		%	
	No. of	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency
	Category 1																				
1	WRD	Nil																			
2	Private																				
	Category 2																				
3	WRD	9	27	39	129	9	27	34	115	1	2	0	0	0	1.28	1	1	2	8	5.76	0
4	Private	0	0	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Total	9	27	41	136	9	27	34	115	1	2	0	0	0	1.22	1	1	2	8	5.52	0

2.4 : Conclusions:

As 07 out of 50 ATR were not received in DSO. Field officers & higher Authorities shall take note of this seriously.

2.5 Points of Attention:

A) Government & Private Owned Dams :

Sr. No.	Expected ATR in DSO	Received in time in DSO		Even after rigorous follow up by DSO		ATR were not received	
		Number	%	Number	%	Number	%
1	50	0	0.00	43	86.00	7	14.00

1. Concerned Chief Engineer should monitor and instruct field Superintending Engineer & Executive Engineer regarding submission of ATR to DSO, Nashik to reflect exact status of Dam Safety works. Otherwise whole execercise of publishing ADHSR will be futile.

2. Concerned Dam owner should give serious attention regarding submission (Before 15th feb 2022) of ATR to DSO, Nashik to reflect exact status of Dam Safety works. Otherwise whole execercise of publishing ADHSR will be futile.

Table - 2.1

Consolidated Abstract of Status of Compliance of Category-1 Deficiencies in ADHSR-2020-21

Sr.No	Agency	Dams & Deficiencies						Status of Deficiencies removal as per compliance report received in DSO, Nashik																					
		Class-I Dam		Class-II Dam		Total		Physically fully completed						Physically partly completed						Administrative action initiated						Compliance report not received in DSO					
								Class-I Dam		Class-II Dam		Total		Class-I Dam		Class-II Dam		Total		Class-I Dam		Class-II Dam		Total		Class-I Dam		Class-II Dam		Total	
		No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1	No. Of Dams	No. of Def. Cat -1
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
----------NIL----------																															

Table - 2.2

Consolidated Abstract of Status of Compliance of Category-2 Deficiencies in ADHSR-2020-21

Sr. No	Agency	Dams & Deficiencies						Status of Deficiencies removal as per compliance report received in DSO, Nashik																					
		Class-I Dam		Class-II Dam		Total		Physically fully completed						Physically partly completed						Administrative action initiated						Compliance report not received in DSO					
								Class-I Dam		Class-II Dam		Total		Class-I Dam		Class-II Dam		Total		Class-I Dam		Class-II Dam		Total		Class-I Dam		Class-II Dam		Total	
		No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2	No. Of Dams	No. of Def. Cat -2
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**
A) Chief Engineer, (S.P) Amravati																															
1	A.I.C. Akola	5	14	21	82	26	96	00	0	0	0	0	0	01	01	02	08	3	9	1	4	5	25	6	29	3	9	14	49	17	58
2	W.I.C. Washim	0	0	3	11	3	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	11	3	11
3	A.I.P.C. Amravati	0	0	1	1	1	01	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1
B) Chief Engineer , W.R, Amravati																															
1	Y.I.C.(M) Yavatmal	2	8	7	18	9	26	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	1	5	1	3	7	18	8	21
2	B.I.P.C. Buldana	0	0	0	0	0	00	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3	Y.I.P.C. Yavatmal	0	0	2	4	2	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	4	2	4
4	U.W.I.C	2	5	5	13	7	18	1	2	0	0	1	2	0	0	0	0	0	0	1	2	1	1	2	3	0	1	4	12	4	13
Government Total		**9**	**27**	**39**	**129**	**48**	**156**	**1**	**2**	**0**	**0**	**1**	**2**	**1**	**1**	**2**	**8**	**3**	**9**	**3**	**11**	**6**	**26**	**9**	**37**	**4**	**13**	**31**	**95**	**35**	**108**
Private																															
1	M.J.P.Circle. Amravati	0	0	2	7	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	2	7
Private Total		0	0	2	7	2	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	7	2	7
Grand Total		**9**	**27**	**41**	**136**	**50**	**163**	**1**	**2**	**0**	**0**	**1**	**2**	**1**	**1**	**2**	**8**	**3**	**9**	**3**	**11**	**6**	**26**	**9**	**37**	**4**	**13**	**33**	**102**	**37**	**115**

Table - 2.3

Dams for which Compliance Report not received in DSO

Sr. No.	Compliance Report not received	Total Number of Dam	Sr. No.	Compliance Report Not Received	Total Number of Dam
1	2	3	4	5	6
Class-I Dams				**Class-II Dams**	
A) Chief Engineer, (S.P) Amravati					
I) Superintending Engineer, Washim Irrigation Circle, Washim.					
1) Executive Engineer, Washim Irrigation Division, Washim			1) Executive Engineer, Washim Irrigation Division, Washim		
				1) Fulumbri 2) Rui 3) Waigoul	03
B) Chief Engineer, WR Amravati					
II) Superintending Engineer, Yavatmal Irrigation Project Circle , Yavatmal.					
1) Executive Engineer, Minor Irrigation Division, Pusad			1) Executive Engineer, Minor Irrigation Division, Pusad		
				1) Kali (D) 2) Amadapur	02
	Total	00		**Total**	05

Contd…….

Table - 2.3

Dams for which Compliance Report not received in DSO

Sr. No.	Compliance Report not received	Total Number of Dam	Sr. No.	Compliance Report Not Received	Total Number of Dam
1	2	3	4	5	6
Class-I Dams				**Class-II Dams**	
Class-I Dams (Private)			**Class-II Dams (Private)**		
I) Superintending Engineer, Maharashtra Jevan Pradhikaran, Amravati.					
I) Executive Engineer, Maharashtra Jevan Pradhikaran, Yavatmal.			I) Executive Engineer, Maharashtra Jevan Pradhikaran, Yavatmal.		
	----------	00		1) Nilona 2) Chaphdoh	02
	Total	00		**Total**	02
	Grand Total	00		**Grand Total**	07

Note- *ATR of all class-I dams (09 dams) were received in DSO*
ATR of 43 class-II dams (out of 50 dams) were received in DSO

Table 2.4

ATR on Category-1 Deficiency in Class-I Dams

Sr. No.	Dam Features	Date Of Inspection	Main Component Of Dam	Observation / Significant Deficiencies Noticed	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6	7
---------- NIL ----------						

Table 2.5

ATR on Category-2 Deficiency in Class-I Dams

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
A) CHIEF ENGINEER (S.P), AMRAVATI **I) SUPERINTENDING ENGINEER A.I.C. AKOLA.** 1) EXECUTIVE ENGINEER, BULDANA IRRIGATION DIVISION, BULDANA						
1	Name :- **Gyanganga** Dist ;- Buldhana Year of Completion: **1971** Location Longitude:: **78° 03' 00"** Latitude: **20° 32' 30"** Height: **42.11** m Gross capacity: **36.264 Mm³** Designed Spillway capacity: 1742 **m³/sec** **(Ungated)** Sr. No. in National register oflarge Dams 2009) :- **MH09HH0267**	24/04/2020 20/10/2020	Earthen dam EDA Outlet Gates Road	1) Heavy vegetation on dam top, berm portion and surrounding of dam and nalla portion. (B13) 2) On D/S concrete apron, there is scouring noticed and is in progress. (A17) 3) There is set of two gates, Stem rod of one of the outlet is damaged,seal plate is also bent.(B5) 4) Approach road to dam site and Head Regulator was heavily damaged.(B6)	Time bound program to remove the vegetation should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Neccesary repaire should be carried out with the help of mechanical organisation. Repairs to road should be carried out immediately.	Repair work included in proposed in DRIP-II Detailed tender paper of work is submitted to SPMU Nashik. ------ do ------ ------ do ------ ------ do ------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
2	Name :- **Pentakli** Dist ;- Buldhana Year of Completion: **2003** Location Longitude::**76° 28' 26"** Latitude: **20° 16' 17"** Height: **27.50** m Gross capacity: **67.33Mm³** Designed Spillway capacity: 6426**m³/sec** **(Ungated)** Sr. No. in National register oflarge Dams 2009) :- **MH09MH1624**	14/05/2020 22/10/2020	Masonry dam River Outlet	1) All foundation drain holes are chocked and Porous pipes are also chocked & need to be cleaned (A9) 2) There is leakage through river sluice gate, Stem rod is bent & Gate slot Is silted (B10)	It should be cleaned. Neccesary repaire should be done with the help of mechanical organisation.	Not Complied. ------ do ------
2) EXECUTIVE ENGINEER, AKOLA IRRIGATION DIVISION, AKOLA						
3	**Name :-Dagadparwa** Dist:-Akola Year of Completion:**2006** Longitude:**77° 10' 29"** Latitude:**20° 01' 09"** Height: **14.20 m** Gross capacity: **23.48 Mm³** Spillway capacity: **1055.44 m³/sec** **(Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09LH2184**	15/04/2020 02/12/2020	Earth dam	1) There is invisible leakage through dam and hence on d/s side wet & slushy patches observed at 100% storage of dam.and also there is water logging & slushy condition upto 300m D/s of dam toe. (A2)	Detailed inspection by field SE should be carried out. Necessary geological investigation should also be carried out. If required combined inspection of field CE and CE CDO should be carried out for getting solution regarding structural repairs.	Not Complied.

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
4	Name :- **Katepurna** Dist.:- Amarawati. Year of Completion: **2005** Location Longitude: Latitude: Height**:** **55.35m** Gross capacity: **41.427Mm³** Spillway capacity: **1239 m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09HH1801**	07/05/2020 02/12/2020	Earth dam Masonry dam End weir Outlet gate	1) The relief wells are not in working condition & not functioning properly (A5) 2) Porous drains (VPD) and Foundation drain holes are chocked /clogged. (A9) 3) Scouring and retrogration is observed at D/S of end sill wall(A17) 4) Rubber seals of outlet gate shows signs of weathering and damaged, need replacement.(B12)	Cleaning and surging of relief wells should be carried out for ensuring effective functioning of wells. Cleaning of porous drains & foundation drain holes should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. . Neccesary repaire should be carried out with the help of mechanical organisation.	Not Complied. ------ do -------- ------ do -------- ------ do --------
5	**Name :-Mun**	16/05/2020 24/11/2020	Spillway Guide bund Tail Channel	1) Concrete at D/s of End sill wall, for 15 to 20 m length was washed away, progressive erosion in tail channel. (A17) 2) Left side and right side guide bund were washed away. (A16) 3) Retrogation observed in D/s side of EDA in Tail channel(A7)	Neccesary repairs to D/s end sill wall should be carried out Field inspection of Suptdg Engr. Should be carried out and do needful as per instructions. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	Work included in non irrigation prapanshuchi for year 2021-22, which will completed upto 31 may 2022. Not Complied. Not Complied.

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
B] CHIEF ENGINEER (WATER RESOURCE), AMRAVATI **I) SUPERINTENDING ENGINEER Y.I.C.(M) YAVATMAL** 1) EXECUTIVE ENGINEER, YAVATMAL IRRIGATION DIVISION						
6	Name :-**Lower Pus** Dist.:- Yawatmal. Year of Completion:**1994** Location Longitude: **77° 48' 00"** Latitude: **20° 07' 00"** Height**: 29.58 m** Gross capacity: **198.39 Mm³** Spillway capacity: **5563m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09MH1343**	11/05/2020 24/11/2020	Earth Dam. EDA Wall Spillway gate Spillway gate	1) Relief wells are not functioning.(A5) 2) Concrete surface of stilling basin apron not in good condition. (A14) 3) There is tendency for water to under cut the end of wall. Walls show symptons of unusal settelements, development of cracks &tilting. Settlement of right side straight wall. (A16) 4) Corrosion observed on some parts of stop log & radial gates,Wire ropes for gate no 2 to 9 need to be replaced & break systemof hoist motor for gate no 1 to 10 is not smooth (A 18) 5)Leakages observed through rubber seals of all gates. (B12)	Cleaning and surging of relief wells should be carried out for ensuring effective functioning of wells. Necessary repaires should be carried out. Necessary precautionary measures to be carried out. Neccesary repaire should be carried out with the help of mechanical rganization. Neccesary repaire should be carried out with the help of mechanical rganization.	Special repair estimate proposal is prepared for this deficiencies & same is under process. ------ do -------- ------ do -------- ------ do -------- ------ do --------

1) EXECUTIVE ENGINEER, ARUNAVATI PRO.DN. DIGRAS						
7	Name :- **ARUNAVATI** Dist.:- Yawatmal. Year of Completion:**1994** Location Longitude: **77° 48' 00"** Latitude: **20° 07' 00"** Height**: 29.58 m** Gross capacity: **198.39 Mm³** Spillway capacity: **5563m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09MH1343**	07/05/2020 24/11/2020	Earthen Dam Outlet Outlet	1) Relief wells are found blocked (A5) 2) Leakages are observed in LBC& RBC Head regulator gate. (A4) 3) RBC outlet gate is not functioning properly, needs repairs. (B5)	Cleaning and surging of relief wells should be carried out for ensuring effective functioning of wells. Neccesary repaire should be carried out with the help of mechanical organisation. .Neccesary repaire should be carried out with the help of mechanical organisation.	Not complied ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
II) SUPERINTENDING ENGINEERUWIC YAVATMAL 2) EXECUTIVE ENGINEER, Med& Mnor Irr. Pro.Dn .Achalpur						
8	Name :- **Chandrabhaga** Dist.:- Amarawati. Year of Completion: **2005** Location Longitude: Latitude: Height**: 55.35m** Gross capacity: **41.427Mm³** Spillway capacity: **1239 m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09HH1801**	20/05/2020 10/11/2020	Outlet Outlet	1) Leakages observed in outlet conduit & from walls of well, Leakages from conduit pipe are observed at D/S of HR (ICPO).(A4) 2) Vibratation & noise noticed during service gate operation and service . Gate alignment need to be checked & repaird, Emergency gate slot need Repairs.(B5)	Detailed inspection of well and conduit by field SE should be carried out & necessary repairs should be done immediately. Neccesary repaire should be carried out with the help of mechanical organisation.	Work done by mechanical organization ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
9	Name :-**Purna Medium proj.** Dist.:- Amarawati. Year of Completion: **2006** Location Longitude: Latitude: Height**: 52.00 m** Gross capacity: **41.759 Mm³** Spillway capacity: **5450m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09HH1319**	20/05/2020 16/12/2020	Earth Dam Earth Dam Spillway gate	1)U/S pitching of dam has been settled in between Rd 400 m.to Rd 800 m &Rd 1300 m. to Rd 2500 m. (B3) 2)U/S Slope between Rd.730m to Rd 847m & Rd 1350 to 1395m is showing bulging & pitching in this portion has settled. (B3) 3)Leakages through spillway radial gate no. 4 (B12)	Section needs to be restored for designed profile. Section needs to be restored for designed profile. Neccesary repaire should be done with the help of mechanical organisation.	Work sanction in special repair work estimate submitted to GOV of Maharashatra by letter no. 5413 dt. 26/08/2021. ------ do -------- Not Complied.

Table 2.6

ATR on Category-1 Deficiency in Class-II Dams

Sr. No.	Dam Features	Date Of Inspection	Main Component Of Dam	Observation / Significant Deficiencies Noticed	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6	7
---------- NIL ----------						

Table 2.7

ATR on Category-2 Deficiency in Class-II Dams

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
A) CHIEF ENGINEER (S.P.) AMRAVATI **I) SUPERINTENDING ENGINEER A.I.C AKOLA** 1) **EXECUTIVE ENGINEER, B.I.D.Buldana.**						
1	Name:-**Godada.** Year of completion :-**1973** Location : - Longitude :-**76o 31' 00**" Latitude :- 21o 05' 45" Height :- 15.64 m. Gross capacity :- 1.89 Mm3 Design Spillway capacity :-**129 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0328** **Dist-Buldana.** **Tal- Jalgaon jamod.**	26/05/2020 07/11/2020 28/01/2021	Earthen Dam W.W & T.C. As Above and Curtain Wall Sadel dam	1) Standing pool of water on D/S of dam at chainage 450m to 850m. (A2) 2) Heavy retrogression observed between Rd 0 to 50 m D/s of W.W.bar. (A17) 1)Curtain Wall damaged for full length.(B7) 2) Resectioning of sadel dam on extreme right side is needed.(B1)	Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Necessary repairs to curtain wall should be carried out. Restore the section of existing sadel dam to the design section.	Not Complied. ------ do -------- ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
2)	Name:- **Rajura** Year of completion :- 1978 Location : - Longitude :- 76o 29' 00" Latitude :- 20o 44' 20" Height :- 17. 73 m. Gross capacity :-3.70 Mm3 Design Spillway capacity :- 532 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH0725** **Dist-Buldana.** **Tal- Jalgaon jamod.**	13/05/2020 07/11/2020 28/01/2021	Earth Dam Tail Channel Tail Channel As above and 1)Curtain Wall in tail channel at Rd 100m damaged for some length.(B7)	1) Standing pool of water is observed in gorge portion. (A2) 2) Guide bund is damaged. (A16) 3) Heavy scouring observed in tail channel 30 m. From W.W. (A7)	Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level. Repairs to guide bunds should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Necessary repairs to curtain wall should be carried out	Not Complied. ------ do -------- ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
3)	Name:-**Haralkhed**	29/05/2020	Earth dam.	1) Dam section is not as per designed (B1)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile.	Not Complied.
		16/10/2020				
			W.W & T.C	2) Retrogression /Scouring in tail channel D/s of spillway. (A16)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	------ do --------
			W.W & T.C	3) Series of falls constructed are fully damaged (A7)	Reconstruction of falls should be done.	------ do --------
				As above and	Time bound program to remove the vegetation should be carried out.	------ do --------
		10/02/2021	Earthen Dam	1) Heavy vegetation of bhushesh and trees are observed on U/S and D/S slopes of dams.(B13)		

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
4)	Name:-**Mandwa (Bld)** Year of completion :- 1995 Longitude :- 76o 20' 00" Latitude :- 20o 01' 20" Height :- 18052 m. Gross capacity :- 4.10 Mm3 Design Spillway capacity :- 725 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH1374** **Dist-Buldana.** **Tal- Sindkhed Raja.**	25/05/2020 13/10/2020	Earth Dam	1) Dam section is not as per designed in respect of top width & level at ch.0 to 120m & 450 to 510m.(B1)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile.	Work included in Non Irrigation Prapansuchi for the year 2021-2022. Estimate got Technical sanction.Tender preparation is in progress.
			Earth Dam	2) Pitching is disturbed through out dam length(B3)	Detailed inspection by field SE should be carried out & necessary repairs should be taken in hand as per instructions.	------ do --------
			Outlet well	3). Outlet well is damaged. Details not given (A6)	Repairs to outlet well should be carried out.	------ do --------
			W.W & T.C.	4). Stilling basin is damaged. (A14)	Damaged portion should be repaired.	------ do --------
		09/02/2021	Earthen dam	As above and 1) Longitudinal cracks of approximately depth 50cm to 100cm and width 5cm to 10cm are observed for most of the length of dam.(B4)	Inspect the crack and carefull record its location, length, depth, width, alignment. Effectively seal the cracks with suitable material at crest surface to prevent infiltration by surface water and monitoring of the cracks	------ do --------
			Earthen dam	2) Heavy vegetation of bhushesh and trees are observed on U/S and D/S slopes of dams.(B13)	Time bound program to remove the vegetation should be carried out.	------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
5)	Name:- **Mas** Year of completion :- 1992 Location : - Longitude :- 76o 39' 45" Latitude :- 20o 36' 15" Height :- 17.71 m. Gross capacity :-17.50 Mm3 Design Spillway capacity :- 942 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH0051** **Dist-Buldana.** **Tal- Khamgaon.**	16/05/2020	Earth Dam	1) Dam section is not as per designed in respect of top width & U/s slope at some places. (B1)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile.	Work included in Non Irrigation Prapansuchi for the year 2021-2022. Tenderprocedure completed.Work will be completed upto Nov 2022.
		01/11/2020	Earth Dam	2) Some patches of pitching are heavily disturbed. Details not given (B3)	Necessary repairs should be carried out.	------ do --------
			Earth Dam	3) Heavy raincuts observed on embankment. (B4)	These should be filled with proper material & necessary compaction should be done.	------ do --------
			Outlet Well	4) Jet of water appearing in both well. Details not given (A6)	Repairs to outlet well should be carried out.	------ do --------
			Waste weir	5). Waste Weir bar mosonary is not in good condition. (B7)	Repairs to Waste Weir bar should carried out to avoid progressive deterioration.	------ do --------
			Tail Channel	9) Retrogression in tail channel. . Details not given.(A7)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	------ do --------
			E.D.A	6). Bed concrete of E.D.A. is damaged. (A14)	Repairs to bed concrete of E.D.A.should be carried out	------ do --------
			Guide Wall	7) Guide wall & Devide wall are damaged (A16)	Repairs to damaged portion of Guide wall & Divide should be carried out	------ do --------
			Guide Bund	8) Guide bund & pitching is heavily disturbed. (B3)	Earth work of guide bunds with pitching of disturbed portion should be carried out.	

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
6)	Name:-**Paldhag** Year of completion :- 1974 Longitude :- 76o 18' 03" Latitude :- 20o 35' 45" Height :- 24.06 m. Gross capacity :- 9.09 Mm3 Design Spillway capacity :- 1095 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH0449** **Dist-Buldana.** **Tal- Buldana.**	18/05/2020 24/10/2020	Earth Dam Earth Dam Tail Channel End weir.	1) Dam section is under section (B1) 2) Settlement & disturbed pitching between RD 90 to 120m & 225 to 360 m. (B3) 3) There is scouring on D/S side of EDA (A7) 4) End sill wall towards left bank collapsed between RD 0 to 60 m & coping in full length is washed away. (A17)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Necessary repairs should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Reconstruction of collapsed end seal wall & coping should be carried out..	Administrative approval granted to estimate under special repair by Gov letter No. RRR-2017/348/2017/dt. 19/09/20219. Work will be carried out after technical approval. ------ do -------- ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
7)	Name:- **Pimpalner** Year of completion :- 1979 Location : - Longitude :- 76o 34' 00" Latitude :- 19o 57' 00" Height :- 16. 30 m. Gross capacity :-2.09 Mm3 Design Spillway capacity :- 453 cumecs Sr. No. in National register of large Dams 2009) :- **MH09MH0784.** **Dist-Buldana.** **Tal- Lonar.**	22/05/2020 18/10/2020 09/02/2021	Earth Dam Waste weir. Tail Channel Tail Channel As above	1) Dam section is not as per designed in respect of top width & Slopes(B1) 2) U/S &D/S face of bar needs pointing. (B8) 3) Scouring observed on D/S of bar(A17) 4) Retrogression in tail channel. (A7)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Necessary Pointing work should be carried out. Proper remedial measure be taken and scouring be monitored. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	Not Complied. ------ do -------- ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
8)	Name:- **Sawangimali-1**	22/05/2020	Earth Dam	1) Dam section is not as per designed Slopes shows concavity in gorge portion. (B1)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile.	Not Complied.
		18/10/2020	Earth Dam	2) Settlement of U/s pitching @ some places in gorge portion. (B3)	Necessary repairs should be carried out.	------ do --------
			Tail Channel	3) Scouring near end sill wall of fall no.1& 2 (A17)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	------ do --------
			Tail Channel	4) Retrogression noticed in Tail channel at some locations. (A7)	---------- do ----------	
9)	Name**:- Sawangimali-2**	22/05/2020	Earth Dam	1) Dam section is not as per designed Slopes shows concavity in gorge portion(B1)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile.	Not Complied.
		18/10/2020	Tail Channel	2) Scouring observed at end sill wall of stilling basin. (A17)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	------ do --------
			Tail Channel	3) Scouring noticed in Tail channel @ some places. (A7)	---------- do ----------	------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
10)	Name:- **Shivani Armal**	23/05/2020	Earth Dam	1) Settlement observed on U/s slope of dam @ RD 600 to750 m, 870 to 900 m(B3)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile.	Not Complied.
		04/10/2020	Tail Channel	2) Heavy scouring is observed at D/S of E.D.A. (A17)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	------ do --------
			Tail Channel	3) Scouring is observed in tail channel.(A7)	---------- do ----------	------ do --------
11)	Name:- **Bramhanwada**	29/05/2020	W.W. & T.C.	1) Retrogression in tail channel by 0.60 to 1.00 m. depth. (A	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	Not Complied.
		16/10/2020				
		10/02/2021		As Above		------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
12)	Name:- **Kardi** Year of completion :- 1997 Location : - Longitude :- 75o 58' 30" Latitude :- 20o 22' 00" Height :- 15.06 m. Gross capacity :- 5.89 Mm3 Design Spillway capacity :-1085 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH1450** **Dist-Buldana.** **Tal- Buldana.**	24/04/2020	Earthen dam	1) Boils observed in main nalla when dam is 100%.(A1)	Necessary investigation should be carried out and boiled area shall be kept under observation with respect to reservoir level.	Work included in Non Irrigation Prapansuchi for the year 2021-2022. Tender procedure completed.Work will be completed upto Nov 2022.
		26/10/2020	Outlet D/S Head Wall	2) Seepage observed at junction of outlet well & earthwork (A3)	Detailed inspection by field SE should be carried out & necessary repairs should be taken in hand as per instructions.	------ do --------
			Waste Weir	3)In stilling basin between gate No.8 & 10 concrete is eroded (10 X 5 m) (A14)	Repairs to eroded portion of stilling basin shouldl be carried out.	------ do --------
			Waste Weir	4) Heavy leakages observed through foundation of w.w. & side of guide wall. (B7)	Necessary investigations should be carried out and reffer this problem to C.E, CDO Nashik for getting solution regarding structural repairs.	------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
13)	Name**:- Vidrupa** Year of completion :- 1990 Location : - Longitude :- 76o 19' 56" Latitude :- 19o 59' 42" Height :- 17.85 m. Gross capacity :- 4.56 Mm3 Design Spillway capacity 920 cumecs Sr. No. In National register oflarge Dams 2009) :- **MH09MH1278** **Dist-Buldana.** **Tal- Sindhkhed Raja.**	26/05/2020 26/10/2020 11/02/2021	Earth dam Earthen dam Earthen dam Earthen dam	1) Settlement of pitching at three places between ch. 60 to 460m Details not given (B3) As above and 2) Heavy vegetation of bushesh and trees are observed on U/S and D/S slopes of dams.(B13) 3) Depression of 0.5m-0.8m on dam top on right side of earthen dam near spillway due to crossing of dam top by vehicle of local farmers to D/S and U/S. (B3) 4)Growth of bushesh on D/S slope of Waste weir is observed.(B7) 5) End sill wall of EDA was damaged for near obout 40m length(B7)	Pitching to be reset by using stones of adequate weight and size laid over properly graded filter. Time bound program to remove the vegetation should be carried out. Resectioning of this portion to designed section should be carried out immediately. Bushesh on slope should be immediately removed. Necessary repairs to end sill wall should be carried out.	The suggested remedial measure are included in 2021-22 prapansuchi maintenance and repairs works and will be completed upto May 2022 ------ do -------- ------ do -------- ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
14)	Name:- **Utawali** Year of completion :- 2005 Location : - Longitude :- 76o 41' 10" Latitude :- 20o 25' 17" Height :- 25.83 m. Gross capacity :- 20.80 Mm3 Design Spillway capacity :- 3740cumecs Sr. No. In National register oflarge Dams 2009) :- **MH09MH1800** **Dist-Buldana.** **Tal- Mehakar.**	16/05/2020 07/11/2020	Earth dam Earth dam Tail Channel	1) Dam section is as per design except U/S ch.2040 to 2100 m 2) Settlement of pitching is observed from RD 2040 to 2100 m. (B3) 3) D/S of bar erosion in tail channel is observed. Also erosion near fall @ ch. 165 m. and at sides of check walls @ ch. 340 & 525 m. (A7)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Necessary repairs should be carried out for setteled portion. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	Not Complied. ------ do -------- ------ do --------
15)	Name:- **Masrul** Year of completion :- 1998 Location : - Longitude :- **75o56' 30"** Latitude :- **20o 25' 06"** " Height :-**17.70** m. Gross capacity :- 9.51Mm3 Design Spillway capacity :- 1068.81cumecs Sr. No. In National register of large Dams 2009) :- **MH09MH1483** **Dist-Buldana.** **Tal- Buldana**	24/04/2020 26/10/2020	Outlet Well Outlet D/S Head Wall	1)Masonry of HR well is damaged at top.(A6) 2) Leakages at D/S head wall near outlet pipe is observed.(A4)	Necessary repairs for damaged portion should be carried out . Detailed inspection by field SE should be carried out. Necessary investigation of outlet conduit should be carried out, reffer this problem to C.E, CDO Nashik for getting solution regarding structural repairs..	Not Complied. ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
I)SUPERINTENDING ENGINEER, AKOLA IRRIGATION CIRCLE,AKOLA E.E.A.I.D., AKOLA.						
16)	Name:- **Nirguna** Year of completion :- **1975** Location : - Longitude :- **76° 01' 00"** Latitude :- **20° 21' 00"** Height :- **25.70 m.** Gross capacity :-**32.29 Mm³** Design Spillway capacity :- **1678 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0530** **Dist-Akola.** **Tal- Patur.**	04/05/2020 06/12/2020	E.D.A Waste weir Guide Bund	1)Coping on end sill is wash away,end sill wall is damage(B7) 2)U/S & D/S face of bar needs pointing (B6) 3)Guide bund pitching is damaged from RD 000 to 600 m.(B3)	Necessary Repairs for the damaged portion should be carried out. Pointing work should be carried out for required portion. Necessary repairs should be carried out for damaged portion.	This work is proposed in 2021-22 prapansuchi. Tender process is completed. Work is under progress. ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
17)	Name:- **Ghota** Year of completion :- **1978** Location : - Longitude :- **77° 18' 00"** Latitude :- **20° 30' 00"** Height :- **15.75 m.** Gross capacity :-**1.65 Mm³** Design Spillway capacity :- **384 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0711** **Dist-Akola.** **Tal- Barshi Takli.**	18/05/2020 12/01/2021	Earth dam Waste Weir Waste Weir Guide wall Tail Channel Tail Channel	1) Undulations on top of dam upto 90 cm. at some chainages is obseved. (B3) 2) Masonry of spillway bar damaged. (B7) 3) Coping is damaged. (B7) 4) Guide wall is damaged. (A16) 5)Scouring on the D/S of bar. (A17) 6) Scouring is noticed in tail channel. (A7)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Repairs to damaged portion of masonary should be carried out. Repairs to damaged portion of coping should be carried out. Repairs to damaged portion of guide wall masonary should be carried out. Proper remedial measure be taken and scouring be monitored. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	Not Cpmplied. ------ do -------- ------ do -------- ------ do -------- ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
18)	Name:-**Tuljapur** Year of completion :- **1975** Location : - Longitude :- **77° 55' 00"** Latitude :- **20° 27' 00"** Height :-**15.00 m.** Gross capacity :- **0.90 Mm³** Design Spillway capacity :- **102 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0467** **Dist-Akola.** **Tal- Patur.**	02/05/2020 05/12/2020	Earth Dam Earth Dam Earth Dam Waste Weir	1)Section of dam is not as per design. Top width is reduced than 3m at many places.(B3) 2)Growth of vegetation is observed on pitched portion.(B3) 3) 1 to 2 cusec leakages noticed near hill on D/S slope @ RD 04m to 50m . (A1) 4)Coping of W.W. bar is damaged at some places(B7)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Vegetation should be cleared. Necessary investigation should be carried out and accordingly measures should be carried out. . Repairs to damaged portion of coping should be carried out.	Not Cpmplied. ------ do -------- ------ do -------- ------ do --------
19)	Name:- **Uma** Year of completion :- **1981** Location : - Longitude :- **74° 24' 06"** Latitude :- **20° 35' 30"** Height :- **22.20 m.** Gross capacity :-**14.01 Mm³** Design Spillway capacity :- **1340 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0899** **Dist-Akola.** **Tal- Murtizapur.**	09/05/2020 11/01/2021	Earthen Dam Tail Channel Tail Channel	1) Junction between embankment and spillway not intact.(A3) 2) Heavy scouring is noticed on D/S of w.w. bar in 500m length ,4to5m depth&10to 30m width. (A17) 3) Curtain wall are damage and washed out. (A7)	Necessary investigation should be carried out and accordingly measures should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Repairs to curtain wall should be carried out	Work has been proposed in Non irrigation prapansuchi for year 2021-22. Tender is under process. ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
20)	Name:- **Pimpalgaon Chambhare.** Year of completion :- **1974** Longitude :- **77° 18' 00"** Latitude :- **20° 30' 00"** Height :- **15. 60 m.** Gross capacity :-**2.53 Mm³** Design Spillway capacity :- **512 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0511.** **Dist-Akola.** **Tal- Barshitakli.**	26/05/2020 12/01/2021	Outlet Gate Waste Weir EDA Tail Channel	1) Curtain wall @ RD 30m of 60m. Length is damaged. (B7) 2) Damages observed to masonary surface of E.D.A. (A14) 3) Coping is damaged & masonary of spillway bar is damaged at some places. (B7) 4) Leakage of 10L/S is observed (A4)	Repairs to Curtain wall shall be done. Repairs to EDA surface shall be done. Necessary repairs shall be carried out. Necessary repairs shall be carried out.	Not Cpmplied. ------ do -------- ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
21)	Name:**- Chinchpani**	06/05/2020	Earth Dam	1) When the dam storage is at FRL 100.90m, leakages observed on D/S of dam at RD 210 m. (discharge of clear water 5 lit/sec) and also wet patches observed in between RD 195m to 225m,. This leakage itself stop when dam storage level comes to 99.40m (A1)	Necessary investigation of leakages should be carried out and accordingly necessary repairs / earth works should be carried out immediately and comunicate to DSO. Storage level should be kept at 99.40m,till repairs not completed.	Not Cpmplied.
		14/01/2020	EDA & Guide Wall	2). Bed concrete of EDA damaged. Plastering of D/S end sill wall is damaged, Damages are also observed to right side guid wall, Leakage are also observed through both guide wall of W.W. (A14)	Repairs to the damaged portion of EDA Concrete, guide wall and end sill wall should be carried out. Necessary repairs to stop leakages from guide wall should be carried out.	------ do --------
			Tail Channel	3). Tail channel needs proper regradation.(A17)	Survey and levelling work should be carried out and Superimpose existing cross sections of tail channel on designed c/s at every 15m interval to ascertain whether tail channel is silt up or not and then if required, regradation should be carried out for free flow of water.	------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
I) SUPERINTENDING ENGINEER, Amravati Irrigation Project Circle , AMRAVATI E.E.I.P & W.I.D, Amravati						
22)	Name:- **Bordinalla** Year of completion :-**2015** Location : - Longitude **77° 59' 09"** Latitude :-**21°24' 00"** Height :- **18 m.** Gross capacity :-**5.91 Mm³** Design Spillway capacity :- **594.80 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09LH2216**	25/05/2020 12/12/2020	Outlet	1) Minor new cracks are observed beside previously seen cracks in settlement area of D/S counduit raft after august 2016. Settlement in sag portion of conduit is increased upto some extent. Details not given (A6)	Combined inspection of field CE and CE CDO should be carried out for getting solution regarding structural repairs.	Not Complied.

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
I) SUPERINTENDING ENGINEER, YAVATMAL IRRIGATION CIRCLE, AMRAVATI E.E.Y.I.D.YAVATMAL						
23)	Name:- **Nignoor**	16/04/2020	Earth Dam	1) At RD 450 to 700 m.heavy seepage of water through earthen dam is observed. Details not given(A1)	Detailed inspection by field SE should be carried out. The path of seepage / leakage shall be investigated & if it is piping,immediate repairs should be carried out. If required combined inspection of field CE and CE CDO should be carried out for getting solution regarding structural repairs.	Not Cpmplied.
			Waste weir	2) Foundation is opened and cavitation below foundation is observed @ R.D.20 m to 25m and stone are dislocated .(B7)	Neccesary repairs to Waste weir masonry should be carried out.	------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
24)	Name:- **Anji** Year of completion :- 1984 Longitude :- 78o 34' 00" Latitude :- 20o 10' 00" Height :- 20.32m. Gross capacity :- 2.80 Mm3 Design Spillway capacity :-210 Sr. No. In National register oflarge Dams 2009) :- **MH09MH1117** **Dist-Yavatmal** **Tal- Ralegaon.**	18/04/2020	Tail Channel Tail Channel Tail Channel	1) Bed concrete of fall is damaged (A7) 2)End sill wall of 1st fall is damaged.Masonry of 2nd fall for about 50 m length is damaged. Masonry of 3rd fall & end sill wall is washed out. (A16) 3)Heavy retrogression in tail channel between first, second and third fall. (A7)	Necessary repairs to the damaged bed concrete of fall should be carried out. Necessary repairs to damaged masonry of end sill walls and falls should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	Not Cpmplied. ------ do -------- ------ do --------
25)	Name:- **Singandoh** Year of completion :- 1993 Location : - Longitude :- 78o 58' 00" Latitude :- 20o 24' 06" Height :- 17m. Gross capacity :- 3.13 Mm3 Design Spillway capacity :- 686 Sr. No. In National register oflarge Dams 2009) :- **MH09MH1310** **Dist-Yavatmal** **Tal- Mer**	28/04/2020	Earth Dam EDA EDA	1) Settlement of dam top by 30 cm through out dam length. (B3) 2) End sill wall is damaged and washout in 30m lenght. (A17) 3) Stilling basin is damaged. (A14)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is setteled or not. Then restored for designed profile. Necessary repairs of damaged portion should be carried out. Necessary repairs of damaged portion should be carried out.	Not Cpmplied. ------ do -------- ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
26)	Name:- **Waghadi** Year of completion :- 1978 Location : - Longitude :- 78o 18' 10" Latitude :- 20o 15' 30" Height :- 26.00 m. Gross capacity :- 41.11 Mm3 Design Spillway capacity :-1815 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH0739** **Dist-Yavatmal** **Tal- Yavatmal.**	17/04/2020	Earth Dam	1) Settlement of pitching from RD 1215 to 1470 & 1500 to 1600 m is observed(B3)	Pitching to be reset by using stones of adequate weight and size laid over properly graded filter.	Not Cpmplied.
27)	Name:- **Kapara** Year of completion :- **1984** Location : - Longitude :- **78°07' 00"** Latitude :- **20°08' 00"** Height :- **20.36 m.** Gross capacity :-**2.80 Mm³** Design Spillway capacity :- **209.5 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0904**	28/04/2020	Outlet Gate Outlet Gate	1) Outlet gate does not open & closed smoothly. Stem rod is bend/ damaged.(B5) 2) Unusual noise during operation.(B5)	Neccesary repaire should be done with the help of mechanical organisation. Neccesary repaire should be done with the help of mechanical organisation.	Not Cpmplied. ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
28)	Name:- **Vihirgaon** Year of completion :- 1992 Location : - Longitude :- 78o 30' 00" Latitude :- 20o 38' 00" Height :- 15.54m. Gross capacity :- 3.17 Mm3 Design Spillway capacity :- 226 Sr. No. In National register oflarge Dams 2009) :- **MH09MH1289** **Dist-Yavatmal** **Tal- Ralegaon.**	18/04/2020	Earthen Dam	1) Wet patches are observed on D/S of dam @30m from rock toe (A1)	Necessary invistagations should be carried out. Try to drain out water through ditches and it should be kept under observation with respect to reservoir level.	Not Cpmplied.
			Outlet Conduit	2) Leakage of water through pipe joint. Seepage or piping around the junction.(A4)	Detailed inspection by field SE should be carried out. Necessary investigation of outlet conduit should be carried out, reffer this problem to C.E, CDO Nashik for getting solution regarding structural repairs.	------ do --------
			Outlet gate	3) Stem rod is bent .unsual noise during operation. (B5)	Neccesary repaire should be carried out with the help of mechanical organisation.	------ do --------
			Fall	4) Bed concrete of fall is damaged(A7)	Necessary repairs to the damaged bed concrete of fall should be carried out.	------ do --------
			Tail Channel	5) Retrogression in tail channel on D/S of fall and foundation of end sill wall is opened. (A7)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
I) SUPERINTENDING ENGINEER, Yavatmal Irrigation CIRCLE, Yavatmal. EE Arunavati project division, Digras						
29)	Name:- **Satpalli** Year of completion :- **2000** Location : - Longitude :- **78° 31' 50"** Latitude :- **29° 19' 25"** Height :- **16.05 m.** Gross capacity :-**2.86 Mm³** Design Spillway capacity :- **185.97 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH2150** **Dist- Yavatmal.** **Tal- Zari Zamni.**	13/05/2020 07/11/2020	Tail Channel End Weir	1) Spill channel guide bund is damaged to very large extent. (A7) 2) End sill wall of W.W. is damaged. (A17)	Necessary repairs to damaged portion of guide bund should be carried out. Necessary repairs to damaged portion of end sill wall should be carried out.	Not Cpmplied. ------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
I) SUPERINTENDING ENGINEER, YAVATMAL IRRIGATION Project CIRCLE E.E. M.I.D.,Pusad						
30)	Name:- **Kali (D)** Year of completion :- **2007** Location : - Longitude :- **77° 42' 52"** Latitude :- **19° 56' 19" .** Height :- **15.32 m.** Gross capacity :-**4.50 Mm³** Design Spillway capacity :- **489.19 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH2151** **Dist-Yavatmal** **Tal- Mahagaon.**	08/05/2020 28/11/2020	Earth dam Earth dam	1) Water logged area on R/S of left bank canal on 100 to 150 m on D/S of dam. (A1) 2) There are wet patches water seepage on the D/S of dam @ 20m from toe.(A1)	Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level	Action Taken Report not received. -------- do --------
31)	Name:- **Amadapur** Year of completion :- **2005** Location : - Longitude :- **77° 55' 49"** Latitude :-:- **20° 40' 48"** Height :- **17.40 m.** Gross capacity :- **14.83 Mm³** Design Spillway capacity :-**796 cumecs** Sr. No. in National register oflarge Dams 2009) :- **- MH09MH2155** **Dist-Yavatmal** **Tal- Umerkhed.**	08/05/2020 09/11/2020	Outlet Well Waste weir	1) Outlet well is horizontly cracked. (A6) 2) Leakage observed through waste weir masonry wall (B7)	Necessary repairs to damaged portion of outlet well should be carried out. Necessary repairs to damaged portion of waste weir masonry should be carried out.	ATR is Not Received In DSO, Nashik -------- do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
I) SUPERINTENDING ENGINEER, UPPER WARDHA PROJECT CIRCLE, AMRAVATI E.E.M&M.I.D. Achalpur						
32)	Name:- **Basalapur** Year of completion :- **1972** Location : - Longitude :- **77° 50' 00"** Latitude :- **20° 50' 00"** Height :- **17.85 m.** Gross capacity :- **1.53 Mm^3** Design Spillway capacity :- **193cumecs** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0275** **Dist-Amravati**	15/05/2020 10/12/2020	Outlet	1) Nearly 1.2 m deep half upper part of well from central cross girder is dislocated. (A6)	Necessary repairs to damaged portion of outlet well should be carried out.	Repair work of well will be proposed in this year sinchan arakhada.
33)	Name:- **Gondvihir**	05/04/2020	Earthen dam	1)Invisible leakages due to fractured rock is observed.(A2)	Detailed inspection by field SE should be carried out. Necessary geological investigation should also be carried out. If required combined inspection of field CE and CE CDO should be carried out for getting solution regarding structural repairs.	Not Complied.
		07/12/2020	Earthen dam	2)Wet patches & slushy ground on D/S of dam.(A2)	Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level	Not Complied.

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
34)	Name:- **Mandwa (AMT)** Year of completion :- **1973** Location : - Longitude :- **76° 47' 00"** Latitude :- **21° 45' 00"** Height :- **17.52 m.** Gross capacity :- **1.37 Mm³** Design Spillway capacity :-**154 cumecs** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0573** **Dist-Amravati.** **Tal- Dharni.**	14/05/2020	Outlet Gate	1) Outlet gate does not open & close smoothly. (B5)	Neccesary repaire should be carried out with the help of mechanical organisation.	Not Complied.
			Outlet Gate	2) Leakage through gate or from slots in closed position(A4)	Neccesary repaire should be carried out with the help of mechanical organisation.	------ do --------
		14/12/2020	Waste weir	3) Coping on W.W.bar is washed out. (B7)	Necessary repairs to damaged portion of coping should be carried out.	------ do --------
			Waste weir	4) U/S & D/S/ face of W.W. bar need pointing. (B8)	Necessary repairs to damaged portion of pointing should be carried out.	------ do --------
			Waste weir	5)Scouring on d/s side of bar (A17)	Necessary repairs to the scoure portion of bar should be carried out.	------ do --------
			Waste weir	6) Retrogression observed in tail channel near curtain wall. (A7)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.	------ do --------

Sr. No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
35)	Name:- **Sakhali Nala** Year of completion :- **1973** Location : - Longitude :- **77° 43' 00"** Latitude :- **20° 33' 00"** Height :- **18.50m.** Gross capacity :- **7.26 Mm³** Design Spillway capacity :- **952.60 cumecs** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0839** **Dist-Amravati.** **Tal- Ner.**	06/05/2020 09/12/2020	Outlet Gate Outlet gate Outlet gate	1) Outlet gate does not open smoothly & Unusual noise during operation. (B5) 2) Leakages observed through gate.(B12) 3) Stem rod not straight. (B5)	Neccesary repaire should be carried out with the help of mechanical organisation. Neccesary repaire should be carried out with the help of mechanical organisation Neccesary repaire should be carried out with the help of mechanical organisation	Not Complied. ------ do -------- ------ do --------
36)	Name:- **Saraswati**	15/05/2020 10/12/2020	Outlet conduit	1) There is leakage from conduit.Details not given(A4)	Detailed inspection by field SE should be carried out. Necessary investigation of outlet conduit should be carried out, reffer this problem to C.E, CDO Nashik for getting solution regarding structural repairs.	Not Complied

Table 2.8

ATR on Category-1 Deficiency in Private Class-I Dams

Sr.No	Dam Features	Date of Inspection	Main component of Dam	Observations / Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
---------- NIL----------						

Table 2.9

ATR on Category-2 Deficiency in Class-I Dams (Private)

Sr.No.	Name of Dam	Date of Inspection	Main component of Dam	Significant Deficiencies Noticed	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6	7
---------- NIL----------						

Table 2.10

ATR on Category-1 Deficiency in Private Class-II Dams

Sr.No.	Name of Dam	Date of Inspection	Main component of Dam	Significant Deficiencies Noticed	Remedial Measures Suggested	Implimentation Status
1	2	3	4	5	6	7
---------- No Such Dams under this category is obsverved ----------						

Table 2.11

ATR on Category-2 Deficiency in Private Class-II Dams

Sr. No.	Name of Dam	Date of Inspection	Main component of Dam	Significant Deficiencies Noticed	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6	7
A) M.J.P, Amravati						
1	Name:- **Nilona** Year of completion :- **1972** Location : - Longitude :- **78° 08' 00"** Latitude :- **20° 23' 00"** Height :- **17.38m.** Gross capacity :- **6.89 Mm³** Design Spillway capacity :-**880** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0307**	26/06/2020 06/11/2020	Earth dam Earth dam Earth dam	1) Heavy vegetation on U/S & D/S slope of dam (B13) 2) Section of earthen dam at many spots is under section & also undulation observed on top of dam (B1) 3)The pitching on U/S of dam is distrubeted at some places. (B3)	Time bound program to remove the vegetation should be carried out. Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Pitching to be reset by using stones of adequate weight and size laid over properly graded filter.	ATR is Not Received In DSO, Nashik -------do------- -------do-------
2	Name:- **Chapdoh** Year of completion :- **2004** Location : - Longitude :- **78° 13' 00"** Latitude :- **20° 15' 38"** Height :- **25.20m.** Gross capacity :- **13.20 Mm³** Design Spillway capacity :-**1310** Sr. No. In National register oflarge Dams 2009) :- **MH09MH2160**	26/06/2020 06/11/2020	1) Approach road to dam site is heavily damaged (B6) 2) Heavy vegetation on U/S & D/S slope of dam (B13) 3)Settlement of earth work on U/S & D/S slopes of dam on left flank for approximate length 90m.	Necessary repairs to road should be done immediately Time bound program to remove the vegetation should be carried out. Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is settled or not. Then restored for designed profile.	Necessary repairs to road should be done immediately Time bound program to remove the vegetation should be carried out. Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is settled or not. Then restored for designed profile.	ATR is Not Received In DSO, Nashik -------do------- -------do-------

Sr. No.	Name of Dam	Date of Inspection	Main component of Dam	Significant Deficiencies Noticed	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6	7
			4)The pitching on U/S of dam is distrubeted at some places. (B3)	Pitching to be reset by using stones of adequate weight and size laid over properly graded filter.	Pitching to be reset by using stones of adequate weight and size laid over properly graded filter.	. -------do-------

Part-3

Dam Health Status Report of Pre & Post Monsoon 2021

Part-3: Dam Health Status Report of Pre & Post Monsoon 2021

3.1 General:

Dam Safety Division No. 2 under Dam Safety Organization, Nashik excersies compilation of Annual Pre & Post Inspection Reports of Dams submitted by Field Offices as well as Test Inspection Reports of Selected Dams carried out by Dam Safety Organization, Nashik in the form of Annual Dam Health Status Report. (ADHSR)

3.2 Inspection Reports submitted by Field Offices :

According to ADHSR 2020-21 of Amravati region there are total 218 dams including private dams, out of that 216 Government owned Dams constitude 23 Class-I, 193 Class-II and 02 Private owned Class-II dams.

As per Government resolution क्रं संकिर्ण- 2017/459/2017/लपा-2, जलसंपदा विभाग, मंत्रालय मुंबई दि. 15/01/2018. 53 Class-II completed Gov.owned dams having ICA less than 600 Ha were transfer to newely founded Water Conservation Department by field authorities.

3 Class-I & 18 Class-II Gov. owned & 02 Class-I private owned completed dams are newly included from this year in ADHSR 2021-22

In all there are 184 Government owned Dams & 04 Private owned Dams are monitored by Dam Safety Organization, Nashik from safety point of view.

184 Government owned Dams constitute 26 Class-I & 158 Class-II Dams & 02 Private owned Class-I Dams & 02 Private owned Class-II Dams.

Government owned Dams : Pre Monsoon Reports of all 26 class-I dams were received & Pre Monsoon report of 04 dams out of 158 class II dams were not received .However, out of 184 Dams, Post Monsoon Reports were received for 144 Dams. 01 class-I Dam Reports was not received in DSO & 39 class-II Dams Reports were not received in DSO. [Ref. Table 3.1 & 3.2]

3.3 Test dam inspection by Dam Safety Organisation :

Test Inspection Programme for Test Inspection of selected Dams is approved by Director General, DTHRS, MERI, Nashik.

As per approved Annual Test Dam Inspection Programme, Class-I Dams are inspected by SE, DSO along with EE, DSD-2 & Class-II Dams are inspected by EE, DSD, Nashik.

On similar lines in case of Private owned Dams, full fledged inspection of Class-I Dam is carried out by SE, DSO along with EE, DSD-2 & Class-II Dam is carried out by EE, DSD-2, Nashik.

Government owned Dams : 3 Class-I & 21 Class-II dams are proposed for test inspection, However 3 Class-I & 24 Class-II were inspected by team of Dam Safety Organization, Nashik.More than 100% target was achived. [Ref. Table 3.5]

Private owned Dams : Post Monsoon Inspections for 10 Class-I Dams & 11 Class-II Dams were carried out by this division. [Ref. Table 3.3 & 3.4]

Following team of officers have inspected targeted Dams in Amravati region

1) Shri M.S.Amale, Superintending Engineer Dam Safety Organization, Nashik
2) Smt.S.Y.Kurhade, Executive Engineer, Dam Safety Division No.2, Nashik
3) Shri S.B.Khairnar, Sub Divisional Engineer, Dam Safety Division No.2, Nashik
4) Shri. S.S.Sangle, Junior Engineer, Dam Safety Division No.2, Nashik.
5) Shri. L. I Dudhal, Junior Engineer, Dam Safety Division No.2, Nashik.

And Following team of officers have taken efforts to prepare this report.

1) Shri M.S.Amale, Superintending Engineer Dam Safety Organization, Nashik
2) Smt S.Y.Kurhade, Executive Engineer, Dam Safety Division No.2, Nashik
3) Shri S.B.Khairnar, Sub Divisional Engineer, Dam Safety Division No.2, Nashik
4) Shri. P K Vandeshkar, Sub Divisional Officer, Dam Safety Division No.2, Nashik
5) Shri. S.S.Sangle, Junior Engineer, Dam Safety Division No.2, Nashik

3.4 Health Status of Class-I & Class-II Dams (Government owned)

This report excerpts details of Deficiencies received from Pre & Post Monsoon Inspections Reports based on detailed inspections carried out by concerned field Superintending Engineer for Class-I Dams & Executive Engineer for Class-II Dams.

And it also covers test inspection carried out by team of officers from Dam Safety Organization, Nashik.

Sr. No.	Category	Total Dams		Reports received in DSO				Cat 1				Cat 2				Cat 3			
	Class	I	II	I		II		I		II		I		II		I		II	
	No. of			Pre	post	Pre	post	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency	Dam	Deficiency
1	WRD	26	158	26	25	180	119	0	0	0	0	09	27	39	114	26	276	158	881
2	Private	2	2	0	2	0	2	0	0	0	0	0	0	2	7	2	16	2	17
	Total	28	160	26	27	180	121	0	0	0	0	09	27	41	121	28	292	160	898

3.5 A Graphical Representation of Deficiencies attended, Submission of Pre/Post Monsoon Reports, Category wise Deficiencies, Class wise Deficiencies is appended in Annexure I.

3.6 Selected Snapshots of DSO Test Inspections are compiled in Annexure II.

3.7 Conclusions :

3.7.1 Frequent Deficiencies Class-I Dams

1. A 5: Relief wells not functioning properly./ Abnormal rise in water level in wells – (03 Dams)
2. A 17:End weir not in good condition / scouring noticed on immediate D/S.– (03 Dams)
3. B 5 : Outlet gates not functioning properly. Stem rod is bent(Service gate/Emergency gate/Stop log gate/sluice gate) (03 Dams)
4. B 12 : Damage to Rubber seals/ considerable Leakages through gates-(03 Dams)
5. A 4 : Major leakages through outlet conduit/pipe joints/Gates.- (02 Dams)

3.7.2 Frequent Deficiencies Class-II Dams

1. A 7 :Retrogression /scouring in tail channel. (12 Dams)
2. B 7: Waste weir/waste weir bar not in good condition/coping damaged / leakage Through waste weir. (11 Dams)
3. B3 : Considerable settlement of embankment / Rock toe/Pitching/ U/S & D/S slops, bulging/concavity(10 Dams)
4. A 6 : Outlet well is damaged/not in good condition /cracks observed/jets of water in well.(09 Dams)
5. A 17:End weir not in good condition / scouring noticed on immediate D/S.(08 Dams)

3.8 Points of Attention :

Sr. No.	Expected Inspection Report in DSO	Pre & Post Monsoon Inspection Report Received in time		Pre & Post Monsoon Inspection Report Not Received in time		Pre & Post Monsoon Inspection Report Not Received	
		Number	%	Number	%	Number	%
1	368	147	39.94	177	48.1	44	11.95

1) This overview provides condensed summary of deficiencies noticed in the Pre & Post Monsoon Inspection Reports Received in DSO & also during test inspection conducted by DSO Officials. Field Officers / Owners of the Dams are required to pay attention to Deficiencies pointed out in ADHSR to maintain Dams in Safe condition.

2) The Chief Engineers are requested to flag this issue and compel all Superintending Engineer & Executive Engineer of concerned Dams to carry out periodic inspections and submit report to D.S.O. in time.

Table 3.1

Status of Receipt of Pre & Post Monsoon Inspection Reports 2021

Sr. No.	Name of Office	Expected Inspection Report in DSO			Pre Monsoon Inspection Report Received in time (By 30th June)			Pre Monsoon Inspection Report Not Received in time (By 30th June)			Pre Monsoon Inspection Report Not Received			Post Monsoon Inspection Report Received in time (By 31st Dec)			Post Monsoon Inspection Report Not Received in time (By 31st Dec)			Post Monsoon Inspection Report Not Received		
		Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
	A) Chief Engineer, (SP) Amravati																					
1	A.I.C. Akola	11	40	**51**	11	12	**23**	00	28	**28**	00	00	**00**	00	40	**40**	11	00	**11**	00	00	**00**
2	W.I.C. Washim	00	41	**41**	00	41	**41**	00	00	**00**	00	00	**00**	00	00	**00**	00	13	**13**	00	28	**28**
3	A.I.P.C. Amravati	02	06	**08**	01	02	**03**	01	00	**01**	00	04	**04**	00	00	**00**	02	06	**08**	00	00	**00**
	B) Chief Engineer, Water Resources , Amravati																					
1	Y.I.C.(M) Yavatmal	05	39	**44**	03	29	**32**	02	10	**12**	00	00	**00**	00	00	**00**	05	29	**34**	00	10	**10**
2	B.I.P.C. Buldana	01	02	**03**	01	02	**03**	00	00	**00**	00	00	**00**	00	00	**00**	00	01	**01**	01	01	**02**
3	Y.I.P.C. Yavatmal	00	11	**11**	00	05	**05**	00	06	**06**	00	00	**00**	00	00	**00**	00	11	**11**	00	00	**00**
4	U.W.I.C	07	19	**26**	00	00	**00**	07	19	**26**	00	00	**00**	00	00	**00**	07	19	**26**	00	00	**00**
	Total	**26**	**158**	**184**	**16**	**91**	**107**	**10**	**63**	**73**	**00**	**04**	**04**	**00**	**40**	**40**	**25**	**79**	**104**	**01**	**39**	**40**

Table 3.2

Dams for which Inspection Report of 2021 is Not Received in DSO

Sr. No.	Pre & Post Monsoon Report Not Received (Both)		Either Pre or Post Inspection Not Received			
			Pre Monsoon		Post Monsoon	
	Class-I	Class-II	Class-I	Class-II	Class-I	Class-II
1	3	3	4	5	6	7
	A) Chief Engineer, S.P, Amravati					
	I) Superintending Engineer Amravati Irrigation Project Circle , Amravati.					
	1) Executive Engineer, Amravati Project Construction Division, Amravati.					
1				Nagthana		
2				Zatamzari		
3				Bahada		
4				Bhimadi		
	II) Superintending Engineer Washim Irrigation Circle , Washim.					
	1) Executive Engineer, Washim Irrigation Division, Washim.					
5						Bramhanwada
6						Davha
7						Ekburji
8						Kalmeshwar
9						Motsawanga
10						Sonal
11						Januna Sonwal
12						Bramha
13						Bhildongar
14						Upper Morna
15						Adol

Sr. No.	Pre & Post Monsoon Report Not Received (Both)		Either Pre or Post Inspection Not Received			
			Pre Monsoon		Post Monsoon	
	Class-I	Class-II	Class-I	Class-II	Class-I	Class-II
1	3	3	4	5	6	7
16						Panchala
17						Falegaon
18						Shelgaon
19						Ganeshpur Barrage
20						Kokalgaon Barrage
21						Warud Barrage
22						Jamuda Barrage
23						Rajgaon Barrage
24						Ukali Barrage
25						Songavhan Barrage
26						Tanka Barrage
27						Dhili Barrage
28						Jaipur Barrage
29						Adgaon Barrage
	2) Executive Engineer, Minor irrigation Division (Construction) Washim					
30						Chakhtirth
31						Wara
32						Pangrabandi
	B) Chief Engineer, W.R, Amravati					
	I) Superintending Engineer Yavatmal Irrigation Circle (M), Yavatmal.					
	1) Executive Engineer, Arunavati Proj Division, Digras.					
33						Khemkund

Sr. No.	Pre & Post Monsoon Report Not Received (Both)		Either Pre or Post Inspection Not Received			
			Pre Monsoon		Post Monsoon	
	Class-I	Class-II	Class-I	Class-II	Class-I	Class-II
1	3	3	4	5	6	7
34						Manjara
35						Nawargaon
36						Wai
37						Wardh
38						Warud
39						Satapalli
40						Mulgavan
41						Sirisgaon
42						Ner
	I) Superintending Engineer Buldana irrigation Project Circle, Buldana					
	1) Executive Engineer Minor irrigation Division, Buldana					
43					Durgbori	
44						Botha
	00	**00**	**00**	**04**	**01**	**39**

Table 3.3

Status of Pre & Post Monsoon Inspection 2021 by DSO (Private)

Sr. No.	Name of Office	To be Inspected by DSO			Pre Monsoon Inspection in time (By 30th June)			Pre Monsoon Inspection Not in time (By 30th June)			Pre Monsoon Not Inspected by DSO			Post Monsoon Inspection in time (By 31st Dec)			Post Monsoon Inspection Not in time (By 31st Dec)			Post Monsoon Not Inspected by DSO		
		Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total
1	2	3	4	5	6	7	8	9	10	1 1	12	13	14	15	16	17	18	19	20	21	22	23
1	**Maha Genco Paras TPS**	02	00	**02**	00	00	**00**	00	00	**00**	02	00	**02**	02	00	**02**	00	00	**00**	00	00	**00**
2	**MJP, Yavatmal**	00	02	**02**	00	00	**00**	00	00	**00**	00	02	**02**	00	02	**02**	00	00	**00**	00	00	**00**
	Total	00	02	**04**	00	00	**00**	00	00	**00**	00	00	**04**	00	02	**04**	00	00	**00**	00	00	**00**

Table 3.4

Dams for which Inspection Not carried out DSO (Private)

Sr. No.	Pre & Post Monsoon Report Not Received (Both)		Either Pre or Post Inspection Not Report			
			Pre Monsoon		Post Monsoon	
	Class-I	Class-II	Class-I	Class-II	Class-I	Class-II
1	3	3	4	5	6	7
	--	--	02	02	00	00
Total	00	00	02	02	00	00

Table 3.5

Dams inspected by Dam Safety Organization, Nashik (2021-22)

Sr. No.	Name of Dam	Date of Inspection	Sr. No.	Name of Dam	Date of Inspection
1	2	3	4	5	6
Class-I Dams			**Class-II Dams**		
A) Chief Engineer, (SP) Amravati.					
I) Superintending Engineer AIC, Akola,					
1) Executive Engineer, AID, Akola			**1) Executive Engineer, BID, Buldana**		
1	Dagadparwa	03/12/2021	1	Garkhed	01/12/2021
			2) Executive Engineer, MID, Buldana		
			2	Lower dnyanganga	02/12/2021
			3) Executive Engineer, AID, Akola		
			3	Shahapur L.M.I	03/12/2021
II) Superintending Engineer WIC, Washim,					
			1) Executive Engineer, WID Washim		
			4	Netansa	26/02/2022
			5	Upper Morna	27/02/2022
			6	Mairaldoh	27/02/2022
			7	Zodga	28/02/2022
			2) Executive Engineer, MID Washim		
			8	Chaktirtha	27/02/2022
			9	Pangrabandi	27/02/2022

			3) Executive Engineer, MID Karanjalad, Washim		
			10	Kasola	28/02/2022
			11	Dastapur	28/02/2022
			12	Kinkhed	28/02/2022
			13	Wadgaon	28/02/2022
			14	Surkandi	01/03/2022
			15	Wara	01/03/2022
			16	Jaipur	01/03/2022
B) Chief Engineer, WR, Amravati.					
I) Superintending Engineer, Yavatmal Irrigation Project Circle, Yavatmal.					
			4) Executive Engineer,YPCD, Yavatmal		
			17	Kumbharpind	10/01/2022
			18	Kohal	10/01/2022
II) Superintending Engineer, Yavatmal Irrigation Circle, Yavatmal.					
2) Executive Engineer,YID, Yavatmal			**5) Executive Engineer,YID, Yavatmal**		
2	Lower Pus	12/01/2022	19	Singandoh	10/01/2022
3	Pus	12/01/2022	20	Kapara	10/01/2022
			21	Durug	11/01/2022
Sr. No.	**Name of Dam**	**Date of Inspection**	**Sr. No.**	**Name of Dam**	**Date of Inspection**
1	**2**	**4**	**5**	**6**	**7**
			22	Dattapur	11/01/2022

			23	Anji	11/01/2022
			24	Vihirgaon	11/01/2022
Private Dams					
Class-I Dams			**Class-II Dams**		
TPS Paras, Akola			**MJP, Yavatmal.**		
1	Paras Barrage	04/12/2021	1	Nilona	11/01/2022
2	Lower Mun Barrage	04/12/2021	2	Chapdoh	11/01/2022
TATA POWER Lonawala					
3	Walwan	21/12/2021	3	Lonawala	08/12/2021
4	Shirwata	21/12/2021	4	Kundali	21/12/2021
5	Thokarwadi	09/12/2021	5	Tulshi	06/12/2021
6	Mulshi	09/12/2021	6	Vihar	06/12/2021
7	Middle Vaitarna	14/12/2021	7	Pawai	06/12/2021
8	Modak Sagar	14/12/2021	8	Sir Pirajiraow	22/12/2021
9	Tansa	16/12/2021	9	Jaisingrao Talav	22/12/2021
10	Pise	16/12/2021	10	Rankala	23/12/2021
			11	Kalamb	23/12/2021

Table 3.6

Deficiency Classification (No. of Dam wise)

Sr. No	Authority	Total Number of Dams			Number of Dams (Class-I)			Number of Dams (Class-II)		
		Class-I	Class-II	Total	Def. Cat-1	Def.Cat-2	Def. Cat-3	Cat-1	Cat-2	Cat-3
	Water Resources Department Dams									
[A]	**CE, (SP) Amravati**	**13**	**87**	**100**	**00**	**05**	**13**	**00**	**19**	**87**
(I)	SE, AIC, Akola.	11	40	51	00	05	11	00	18	40
1	EE, BID,Buldana	06	28	34	00	03	06	00	11	28
2	EE, AID, Akola.	03	11	14	00	02	03	00	06	11
3	EE, MID Akola	02	01	03	00	00	02	00	01	01
(II)	SE,WIC, Washim.	00	41	41	00	00	00	00	00	41
1	EE, WID, Washim.	00	25	25	00	00	00	00	00	25
2	EE, MID(Const), Washim	00	06	06	00	00	00	00	00	06
3	EE MID Karanja lad.	00	10	10	00	00	00	00	00	10
(III)	SE, AIPC, Amravati.	02	06	08	00	00	02	00	01	06
1	EE, APCD, Amravati	00	04	04	00	00	00	00	00	04
2	EE, IP & WRID, Amravati	02	02	04	00	00	02	00	01	02
[B]	CE, WR, Amravati	13	71	84	00	04	13	00	20	71
(I)	SE,YIC, Yavatmal	05	39	44	**00**	02	05	**00**	11	39
1	EE, Arunavati Pro. Dn, Digras	02	10	12	00	01	02	00	01	10
2	EE YID, Yavatmal	02	29	31	00	01	02	00	10	29
3	EE, Bembla Pro. Dn, Yavatmal	01	00	01	00	00	01	00	00	00
(II)	SE, BIPC, Buldana.	01	02	03	00	00	01	00	00	02
1	EE, MID, Buldana	01	02	03	00	00	01	00	00	02
(III)	SE, YIPC, Yavatmal	00	11	11	00	00	00	00	03	11
1	EE, YPCD, Yavatmal.	00	06	06	00	00	00	00	01	06
2	EE, MID Pusad.	00	05	05	00	00	00	00	02	05

Sr. No	Authority	Total Number of Dams			Number of Dams (Class-I)			Number of Dams (Class-II)		
		Class-I	Class-II	Total	Def. Cat-1	Def.Cat-2	Def. Cat-3	Cat-1	Cat-2	Cat-3
(III)	SE, UWIC, Amravati	07	19	26	00	02	07	00	06	19
1	EE, AMPD, Amravati	01	02	03	00	00	01	00	00	02
2	EE, Upp.wardha Dam Div	01	00	01	00	00	01	00	00	00
3	EE, M&M Irri.Pro. Dn. Achalpur	04	14	18	00	02	04	00	04	14
4	EE, AID, Amravati	01	03	04	00	00	01	00	02	03
	WRD Total	**26**	**158**	**184**	**00**	**09**	**26**	**00**	**39**	**158**
	Private Dams									
1	MJP, Yavatmal	00	02	**02**	00	00	00	00	02	02
2	Paras TPS	02	00	**02**	00	00	02	00	00	00
	Private Total	02	02	**04**	00	00	02	00	02	02
	Grand Total	**28**	**160**	**188**	**00**	**09**	**28**	**00**	**41**	**160**

Note - 1. Out of 26 Govt. owned Class-I Dams, all Pre Monsoon reports were received & Only 25 Dams Post Monsoon Report were received in DSO.

2. Out of 158 Govt. owned Class-II Dams, only 180 Pre Monsoon reports were received & Only 119 Dams Post Monsoon Report were received in DSO

Table 3.7

Deficiency Classification (No. of Deficiency wise)

Sr. No	Authority	No. of Dams having Deficiencies						Number of Deficiencies								
		Cat-1		Cat-2		Cat-3		Category–1			Category–2			Category–3		
		Class-I	Class-II	Class-I	Class-II	Class-I	Class-II	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total
	Water Resources Department Dams															
[A]	**CE, (SP) Amravati**	00	00	05	21	13	87	00	00	00	14	62	76	137	511	648
(I)	SE, AIC, Akola.	00	00	05	21	11	40	00	00	00	14	62	76	137	290	427
1	EE, BID,Buldana	00	00	03	11	06	28	00	00	00	09	37	46	89	235	324
2	EE, AID, Akola.	00	00	02	06	03	11	00	00	00	05	25	30	31	55	86
3	EE, MID Akola	00	00	00	01	02	00	00	00	00	00	00	00	17	0	17
(II)	SE,WIC, Washim.	00	00	00	00	00	41	00	00	00	00	00	00	00	218	218
1	EE, WID, Washim.	00	00	00	00	00	25	00	00	00	00	00	00	00	188	188
2	EE, MID(Const), Washim	00	00	00	00	00	06	00	00	00	00	00	00	00	19	19
3	EE MID Karanja lad.	00	00	00	00	00	10	00	00	00	00	00	00	00	11	11
(III)	SE, AIPC, Amravati.	00	00	00	01	02	06	00	00	00	00	01	01	00	03	03
1	EE, APCD, Amravati	00	00	00	00	00	04	00	00	00	00	00	00	00	00	00
2	EE, IP & WRID, Amravati	00	00	00	01	00	02	00	00	00	00	01	01	00	03	03
[B]	CE, WR, Amravati	00	00	04	20	13	71	00	00	00	13	51	64	139	370	509
(I)	SE,YIC, Yavatmal	00	00	02	11	05	39	00	00	00	08	30	38	55	222	277
1	EE, Arunavati Pro. Dn, Digras	00	00	01	01	02	10	00	00	00	03	02	05	22	52	74
2	EE YID, Yavatmal	00	00	01	10	02	39	00	00	00	05	28	33	23	170	193
3	EE, Bembla Pro. Dn, Yavatmal	00	00	00	00	01	00	00	00	00	00	00	00	10	00	10
(II)	SE, BIPC, Buldana.	00	00	00	01	01	02	00	00	00	00	01	01	00	07	07
1	EE, MID, Buldana	00	00	00	01	01	02	00	00	00	00	01	01	00	07	07

Sr. No	Authority	No. of Dams having Deficiencies						Number of Deficiencies								
		Cat-1		Cat-2		Cat-3		Category–1			Category–2			Category–3		
		Class-I	Class-II	Class-I	Class-II	Class-I	Class-II	Class-I	Class-II	Total	Class-I	Class-II	Total	Class-I	Class-II	Total
(III)	SE, YIPC, Yavatmal	00	00	00	03	00	11	00	00	00	00	05	05	00	47	47
1	EE, YPCD, Yavatmal.	00	00	00	01	00	06	00	00	00	00	01	01	00	19	19
2	EE, MID Pusad.	00	00	00	02	00	05	00	00	00	00	04	04	00	28	28
(III)	SE, UWIC, Amravati	00	00	02	06	07	19	00	00	00	05	15	20	84	94	178
1	EE, AMPD, Amravati	00	00	00	00	01	02	00	00	00	00	00	00	11	04	15
2	EE, Upp.wardha Dam Div	00	00	00	00	01	00	00	00	00	00	00	00	11	00	11
3	EE, M&M Irri.Pro. Dn. Achalpur	00	00	02	04	04	14	00	00	00	05	13	18	52	84	136
4	EE, AID, Amravati	00	00	00	02	01	03	00	00	00	00	02	02	10	06	16
	WRD Total	**00**	**00**	**09**	**40**	**26**	**157**	**00**	**00**	**00**	**27**	**114**	**141**	**276**	**881**	**1157**
	Private															
1	Maha Genco Paras TPS	00	00	00	00	02	00	00	00	00	00	00	00	16	00	16
2	MJP, Yavatmal	0	0	00	02	00	02	00	00	00	00	07	07	00	17	17
	PrivateTotal	**0**	**0**	**00**	**02**	**02**	**02**	**00**	**00**	**00**	**00**	**07**	**07**	**16**	**17**	**33**
	Grand Total	**0**	**0**	**09**	**41**	**28**	**159**	**00**	**00**	**00**	**27**	**121**	**148**	**292**	**898**	**1190**

Table 3.8

Category-1 Deficiency Classification (Dam wise)

Sr. No	Name of Dam	No. of deficiencies noticed	Sr. No	Name of Dam	No. of deficiencies noticed
1	2	3	4	5	6
Class - I Dams			Class - II Dams		
---------- NIL ----------					

Table 3.9

Category-2 Deficiency Classification (Dam wise)

Sr. No	Name of Dam	No. of deficiencies noticed	Sr. No	Name of Dam	No. of deficiencies noticed
1	2	3	4	5	6
Class - I Dams			**Class - II Dams**		
A) Chief Engineer, (SP), Amravati.					
I) Superintending Engineer AIC, Akola.					
1) Executive Engineer, Buldana Irrigation Division, Buldana.					
1	Dnyanganga	05	1	Godada	02
2	Pentakli	03	2	Rajura	03
3	Mun	04	3	Mandwa(BLD)	04
			4	Mas	08
			5	Paldhag	04
			6	Pimpalner	04
			7	Torna	01
			8	Utawali	03
			9	Kardi	04
			10	Vidrupa	01
			11	Masrul	02
2) Executive Engineer, Akola Irrigation Division, Akola.					
4	Katepurna	04	12	Nirguna	04

Sr. No	Name of Dam	No. of deficiencies noticed	Sr. No	Name of Dam	No. of deficiencies noticed
1	2	3	4	5	6
5	Dagadparwa	01	13	Ghota	06
			14	Tuljapur	04
			15	Uma	03
			16	Pimpalgaon Chambhare	04
			17	Shahapur LMI	04
2) Executive Engineer, Minor Irrigation Division, Akola.					
			18	Shahapur	01
II) Superintending Engineer A.I.P.C.					
			1) Executive Engineer, IP & WRID, Amravati		
			19	Bordinala	01

Sr. No	Name of Dam	No. of deficiencies noticed	Sr. No	Name of Dam	No. of deficiencies noticed
1	2	3	4	5	6
Class – I Dams			**Class – II Dams**		
B) Chief Engineer, WR, Amravati.					
I) Superintending Engineer YIC, .					
1) Executive Engineer, Arunavati Pro.Dn. Digras			**1) Executive Engineer, Arunavati Pro.Dn. Digras**		
6	Arunavati	03	20	Satpali	02
2) Executive Engineer, Yavatmal Irrigation Division, Yavatmal.			**2) Executive Engineer, Yavatmal Irrigation Division, Yavatmal.**		
			21	Anji	04
			22	Deogaon	01
			23	Dudhana	01
			24	Durug	03
7	Lower Pus	05	25	Kapara	03
			26	Nignoor	02
			27	Pendhari	02
			28	Singandoh	05
			29	Waghadi	01
			30	Vihirgaon	06
II) Superintending Engineer YIPC, . Yavatmal					
			1) Executive Engineer, MID Pusad.		

Sr. No	Name of Dam	No. of deficiencies noticed	Sr. No	Name of Dam	No. of deficiencies noticed
1	2	3	4	5	6
			31	Kali(D)	02
			32	Amadapur	02
			1) Executive Engineer, Y.P.C.D, Yavatmal.		
			33	Dahegaon	01
SE BIPC Buldana					
			EE MID Buldana		
			34	Lower Dnyanganga	01

Sr. No	Name of Dam	No. of deficiencies noticed	Sr. No	Name of Dam	No. of deficiencies noticed
1	2	3	4	5	6
Class – I Dams			**Class – II Dams**		
III) Superintending Engineer UWIC, Amravati.					
1) Executive Engineer, M & M Irr.Pro.Dn Achalpur.			**1) Executive Engineer, M & M Irr.Pro.Dn Achalpur.**		
8	Chandrabhaga	02	35	Baslapur	01
9	Purna	03	36	Bhivapur	03
			37	Mandwa(Amt)	06
			38	Sakhali Nala	03
			1) Executive Engineer, Amravati Irrigation Division		
			39	Songaon Shivani LMI	01
			40	Chandas Wathod	01
Private Dams					
Paras TPS, Akola			**Maharashtra Jevan Pradhikaran, Yavatmal.**		
			41	Nilona	03
			42	Chapdoh	04

Table 3.10

Class-I Dams with Category-1 Deficiency

Sr. No.	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Observation / Significant Deficiencies noticed	Remedial Measures Suggested
1	2	3	4	5	6	7
---------- NIL ----------						

Table 3.11

Damwise Health status report of Class-I dams with category-2 deficiency

Sr. No.	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Observation / Significant Deficiencies noticed	Remedial Measures Suggested
A)CHIEF ENGINEER, S.P. Amarawati I) SUPERINTENDING ENGINEER, AKOLA IRRIGATION CIRCLE,AKOLA 1) E.E. A.I.D. Akola						
1	Name :- **Katepurna** Dist ;- Akola Year of Completion: **1974** Location Longitude: **77° 09' 00"** Latitude: **20° 28' 30"** Height: **29.5** m Gross capacity: **97.67 Mm³** Designed Spillway capacity: 2783**m³/sec** **(Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09MH455**	21/05/2021 25/11/2021	Shri S G Rathi S.E. A.I.C.,Akola Shri S G Rathi S.E. A.I.C.,Akola	Earth dam Masonry dam End weir Outlet gate	1) The relief wells are not in working condition & not functioning properly(A5) 2) Porous drains (VPD) and Foundation drain holes are chocked /clogged. (A9) 3) Scouring and retrogration is observed at D/S of end sill wall(A17) 4) Rubber seals of outlet gate shows signs of weathering and damaged, need replacement.(B12)	Cleaning and surging of relief wells should be carried out for ensuring effective functioning of wells. Cleaning of porous drains & foundation drain holes should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. . Neccesary repaire should be carried out with the help of mechanical organization.

Sr. No	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Observation / Significant Deficiencies noticed	Remedial Measures Suggested
2	**Name :-Dagadparwa** Dist:-Akola Year of Completion:**2006** Longitude:**77° 10' 29"** Latitude:**20° 01' 09"** Height: **14.20 m** Gross capacity: **23.48 Mm³** Spillway capacity: **1055.44 m³/sec** **(Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09LH2184**	21/05/2021 25/11/2021 03/12/2021	Shri S G Rathi S.E.A.I.C., Akola Shri S G Rathi S.E.A.I.C., Akola Smt S Y Kurhade EE DSD-2	Earth dam	1) There is invisible leakage through dam and hence on d/s side wet & slushy patches observed .and also there is water logging & slushy condition upto 300m D/s of dam toe(A2) As per above & it is observed that there is invincible leakage through dam & wet slushy patches were seen on D/S at an approximate distance of 150 m near tail channel left flank in survey no. 154 & 155 of pimpal shenda village.	Detailed inspection by field SE should be carried out. Necessary geological investigation should also be carried out. If required combined inspection of field CE and CE CDO should also be carried out for getting solution regarding structural repairs.
2) E.E. B.I.D. Buldhana						
3	Name :- **Pentakli** Dist ;- Buldhana Year of Completion: **2003** Location Longitude::**76° 28' 26"** Latitude: **20° 16' 17"** Height: **27.50** m Gross capacity: **67.33Mm³** Designed Spillway capacity: 6426**m³/sec** **(Ungated)** Sr. No. in National register oflarge Dams 2009) :- **MH09MH1624**	17/05/2021 28/12/2021	Shri S G Rathi S.E. A.I.C.,Akola Shri S G Rathi S.E. A.I.C.,Akola	Masonry dam River Outlet	1) Porous pipes and foundation drain holes are chocked & need to be cleaned (A9) 2) Stem rod of river sluice is bent. (B10)	Cleaning of porous drains & foundation drain holes should be carried out. Neccesary repaire should be carried out with the help of mechanical organization.

Sr. No	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Observation / Significant Deficiencies noticed	Remedial Measures Suggested
4	**Name :-Mun** Dist:-Buldhana Year of Completion: **1991** Location Longitude: **76° 39' 48¢¢** Latitude: **22° 27' 40¢¢** Height: **39.7 m** Gross capacity: **42.48 Mm³** Spillway capacity: **2220 m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09HH1492**	16/05/2021 27/12/2021	Shri S G Rathi S.E. A.I.C.,Akola Shri S G Rathi S.E. A.I.C.,Akola	Spillway Guide bund Tail Channel	1) Concrete immediate D/s of End sill wall, for 15 to 20 m length was washed away, progressive erosion in tail channel. (A17) 2) Left side and right side guide bund were washed away. (A16) 3) Retrogation observed in D/s side of EDA in Tail channel (A7)	Neccesary repairs to D/s end sill wall should be carried out Field inspection of Suptdg. Engr. Should be carried out and do needful as per instructions. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.
5	Name :- **Gyanganga** Dist ;- Buldhana Year of Completion: **1971** Location Longitude:: **78° 03' 00"** Latitude: **20° 32' 30"** Height: **42.11** m Gross capacity: **36.264 Mm³** Designed Spillway capacity: 1742 **m³/sec** **(Ungated)** Sr. No. in National register oflarge Dams 2009) :- **MH09HH0267**	16/05/2021 27/12/2021	Shri S G Rathi S.E. A.I.C.,Akola Shri S G Rathi S.E. A.I.C.,Akola	Earthen dam EDA Outlet Gates Road	1) Heavy vegetation on dam top, berm portion and surrounding of dam and nalla portion. (B13) 2) EDA not provided, On D/S concrete apron, there is scouring noticed and is in progress. There is also progressive erosion in tail channel (A17) 3) Seal plates are bent, due to this leakages observed from gates (B5) 4) Approach road to dam site and Head Regulator was heavily damaged.(B6)	Time bound program to remove the vegetation should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Neccesary repaire should be carried out with the help of mechanical organization. Repairs to road should be carried out immediately.

Sr. No	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Observation / Significant Deficiencies noticed	Remedial Measures Suggested
B) CHIEF ENGINEER, W.R. Amarawati **I) SUPERINTENDING ENGINEER, Yavatmal Irrigation Ciircle (M), Yavatmal** **1) E.E. Y.I.D, Yavatmal**						
6	Name :- **Lower Pus** Dist ;- Yavatmal. Year of Completion: **1983** Location Longitude: **77° 40' 00"** Latitude: **19° 49' 00"** Height: **28. 00** m Gross capacity: **81.16 Mm³** Designed Spillway capacity: **5437 m³/sec** **(Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09MH1012**	06/05/2021 24/01/2022 12/01/2022	Shri A.N. Bahadure S.E.Y.I.C.(M) Yavatmal Shri M.N Rajbhoj S.E.Y.I.C.(M) Yavatmal Smt S Y Kurhade EE DSD-2	Earth Dam. EDA Wall Spillway gate Spillway gate	1) Relief wells are not functioning.(A5) 2) Concrete surface of stilling basin apron not in good condition. (A14) 3) There is tendency for water to under cut the end of wall. Walls show symptons of unusal settelements, development of cracks & tilting. Settlement of right side straight wall. (A16) 4) Leakages observed through rubber seals of gate no-2. (B12) 5) Heavy leakages through left side concrete pier of gate no-8 (A15) As per above	Cleaning and surging of relief wells should be carried out for ensuring effective functioning of wells. Necessary repaires should be carried out. Necessary precautionary measures to be carried out. Neccesary repaire should be carried out with the help of mechanical organization. Leakage discharge shall be measure. The source of leakages point shall be identified after reserviour level comes bellow crest. Necessary measures such as grouting shall be taken on priority in guidance of higher field authorities.

Sr. No	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Observation / Significant Deficiencies noticed	Remedial Measures Suggested
2) E.E. Arunawati Pro. Dn.Digras, Yavatmal						
7	Name :- **Arunawati** Dist.:- Yawatmal. Year of Completion:**1994** Location Longitude: **77° 48' 00"** Latitude: **20° 07' 00"** Height**: 29.58 m** Gross capacity: **198.39 Mm³** Spillway capacity: **5563m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09MH1343**	08/05/2021 23/12/2021	Shri A.N. Bahadure S.E.Y.I.C.(M) Yavatmal Shri M.N Rajbhoj S.E.Y.I.C.(M) Yavatmal	Earthen Dam Outlet Outlet	1) Relief wells are found blocked (A5) 2) Leakages are observed in LBC& RBC Head regulator gate. (A4) 3) RBC outlet gate is not functioning properly, needs repairs. (B5)	Cleaning and surging of relief wells should be carried out for ensuring effective functioning of wells. Neccesary repaire should be carried out with the help of mechanical organization. . Neccesary repaire should be carried out with the help of mechanical organization.
III) S.E.,Upper Wardha Irrigation Circle,Amravati **1) E.E. Med & Mnor Irr. Pro.Dn .Achalpur**						
8	Name :- **Chandrabhaga** Dist.:- Amarawati. Year of Completion: **2005** Location Longitude: Latitude: Height**: 55.35m** Gross capacity: **41.427Mm³** Spillway capacity: **1239 m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09HH1801**	16/05/2021 26/11/2021	Shri R.S. Deshmukh S.E U.W.I.C. Amarawati Shri R.S. Deshmukh S.E U.W.I.C. Amarawati	Outlet Outlet	1) Leakages observed in outlet conduit & from walls of well, Leakages from conduit pipe are observed at D/S of HR (ICPO).(A4) 2) Service gate needs to be repaired, leakages are there and gate alignment need to be checked. (B5)	Detailed inspection of well and conduit by field SE should be carried out & necessary repairs should be done immediately. Neccesary repaire should be carried out with the help of mechanical organization.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
9	Name :-**Purna Medium proj.** Dist.:- Amarawati. Year of Completion: **2006** Location Longitude: Latitude: Height**: 52.00 m** Gross capacity: **41.759 Mm³** Spillway capacity: **5450m³/sec (Gated)** Sr. No. in National register oflarge Dams 2009) :- **MH09HH1319**	16/05/2021 27/10/2021	Shri R.S. Deshmukh S.E U.W.I.C. Amarawati Shri R.S. Deshmukh S.E U.W.I.C. Amarawati	Earth Dam	1) U/S Slope between Rd.730m to Rd 847m & Rd 1350 to 1395m is showing bulging. U/S pitching has settled in between Rd 400 m. to Rd 847 m. & Rd 1320m. to Rd 1410m & Rd1800m to2580 m. (B 3) 2) Lighting system in Drainage gallery is totally damaged and there is no stand by units for lighting.. (A 8) 3) Leakages through spillway radial gate no. 4 due to rubber seal problem (B12)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is settled or not. Then restored for designed profile. Neccesary repaire should be carried out Immediately. Neccesary repaire should be carried out with the help of mechanical organization.

Table 3.12

Damwise Health status report of **Class-I dams** with **category-3 deficiency**

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	12
A) CHIEF ENGINEER, S.P. Amarawati **I) Superintending Engineer, Akola Irrigation Circle, Akola** 1) Executive Engineer, Buldana Irrigation Division, Buldana.											
1	**Nalganga**	1963	78º 03' 00" 20º 32' 30"	35.14	71.86	2302	MH09HH0152	Gated	17/05/2021 10/10/2021	3.1,3.2,3.5,3.6,3.7,3.10,3.20,3.24,3.26,3.27,3.28,3.303.31,3.35	14
3	**Gyanganga**	1971	78º 03' 00" 20º 32' 30"	42.11	36.26	1742	MH09HH0267	Ungated	16/05/2021 27/12/2021	3.1,3.2,3.5,3.6,3.7,3.10,3.13,3.16,3.20,3.22,3.24,3.26,3.283.30,3.31	15
3	**Dongarshewali**	2010	76º 20' 09" 20º 28' 08"	30.93	2.35	405.36	MH09MH2136	Ungated	17/05/2021 27/12/2021	3.1,3.2,3.5,3.6,3.7,3.9,3.10, 3.16,3.20,3.21,3.24,3.25,3.26, 3.28,3.30,3.31	16
4	**Pentakli**	2003	76º 28' 26" 20º 16' 17"	27.5	67.33	6426	MH09MH1624	Gated	17/05/2021 28/12/2021	3.1,3.2,3.5,3.6,3.9,3.10,3.11, 3.12,3.13,3.18,3.20,3.23,3.273.28,3.30,3.31,3.33	17
5	**Mun**	1991	76º 39' 48" 22º 27' 40"	39.7	42.48	2220	MH09HH1492	Gated	16/05/2021 27/12/2021	3.1,3.2,3.5,3.6,3.7,3.9,3.13, 3.18,3.20,3.28,3.30,3.31	12
6	**Khadakpurna (Buldana)**	2008	76º 40' 30" 20º 09' 30"	42.60	160.606	652	MH09HH2137	Gated	17/05/2021 28/12/2021	3.1,3.2,3.5,3.11,3.12,3.13, 3.18,3.20,3.23,3.24,3.26,3.28,3.30, 3.31,3.36	15
2) Executive Engineer, Akola Irrigation Division, Akola.											
7	**Katepurna**	1974	77º 09' 00" 20º 28' 30"	29.5	97.67	2783	MH09MH455	Gated	21/05/2021 25/11/2021	3.1,3.6,3.18,3.21,3.34,3.25, 3.26,3.28,3.31,3.36,	10

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
8	**Dagadparwa**	2006	77º 10' 29" 20º 01' 09"	14.20	23.48	1055.44	MH09LH2184	Gated	21/05/2021 25/11/2021 03/12/2021	3.1,3.7,3.13,3.18,3.20,3.27, 3.28,3.31.	08
9	**Wan(Akola)**	2001	76º 46' 25" 21º 11' 08"	68.39	83.465	3434.1	MH09HH1560	Gated	26/05/2021 17/11/2021	3.6,3.12,3.16,3.18,3.19,3.20,3.21,3.23,3.26,3.27,3.28,3.313.36	13
3) Executive Engineer, Minor Irrigation Division, Akola.											
10	**Khirkund**	1999	77º 13' 00" 21º 14' 09"	33.3	5.6	652.4	MH09HH1516	Ungated	26/05/2021 17/11/2021	3.1,3.6,3.13,3.18,3.20,3.28, 3 .30	07
11	**Popatkhed**	2005	77º 05' 00" 21º 12' 09"	37.73	12.19	1186	MH09HH1656	Gated	26/05/2021 17/11/2021	3.1,3.6,3.13,3.18,3.20,3.26,3.27,3.28,3.30,3.31	10
I) Superintending Engineer, Amravati Irrigation Project Circle, Amravati. 1) Executive Engineer, Irrigation Project & Water Resources Division.Amravati											
12	**Ghungshi Barrage**	2017	77º 16' 30" 20º 51' 00"	35.45	17.446	8680	MH09MH2217	Gated	21/04/2021 22/02/2022	-------	Nil
13	**Ampati**	2019	77º 32' 30" 21º 35' 30"	33.28	7.332	373.46	----	Ungated	15/05/2021 16/11/2021	----------	Nil
B) CHIEF ENGINEER, (W.R.),Amarawati **I) Superintending Engineer, Yavatmal Irrigation Circle (M) Yavatmal** 1) Executive Engineer, Arunavati Pro. Dn. Digras.											
14	**Adan**	1977	77º 33' 00" 20º 24' 00"	30.29	78.32	4623	MH09HH0660	Gated	08/05/2021 27/12/2021	3.6,3.9,3.10,3.22,3.23,3.24, 3.25, 3.28,3.31,3.36.	10
15	**Arunawati**	1994	77º 48' 00" 20º 07'00"	29.58	198.39	5563	MH09MH1343	Gated	08/05/2021 23/12/2021	3.1,3.5,3.6,3.9,3.20,3.21,3.23, 3.24,3.25,3.28,3.31,3.36.	12
2) Executive Engineer, Yavatmal Irrigation Division, Yavatmal.											

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
16	**Lower Pus**	1983	77° 40' 00" 19° 49' 00"	28.00	81.16	5437	MH09MH1012	Gated	06/05/2021 24/01/2022 12/01/2022	3.1,3.9,3.11,3.16,3.18,3.13, 3.19,3.20,3.25,3.26,3.27,3.283.31,3 .36	13
17	**Pus**	1971	77° 27' 00" 29° 15' 00"	43.29	113.92	4007	MH09HH0268	Ungated	06/05/2021 24/01/2022 12/01/2022	3.1,3.6,3.9,3.13,3.19,3.23, 3.25,3.28,3.31,3.34	10
3) Executive Engineer, Bembla. Pro. Dn.Yavatmal											
18	**Bembla**	2007	78° 8' 08" 20° 37'10""	35.80	322.068	17224	MH09MH2138	Gated	06/05/2021 02/12/2021	3.1,3.9,3.12,3.18,3.20,3.26, 3.28,3.31,3.34,3.36	10
II) Superintending Engineer, U.W.I.C.Amravati **1)** Executive Engineer, Minor & Medium Irri. Pro. Dn. Achalpur											
19	Shahanoor	1989	77° 28' 00" 21° 22' 00"	58.5	47.85	170	MH09HH1212	Gated	16/05/2021 26/11/2021	3.1,3.5,3.6,3.9,3.10,3.13,3.163.18,3 .20,3.21,3.22,3.28,3.30,3.31,3.33	15
20	**Chandrabhaga**	2005	77° 23' 30" 21° 20' 30"	55.35	41.427	1239	MH09HH1801	Gated	16/05/2021 26/11/2021	3.1,3.2,3.5,3.6,3.7,3.9,3.11, 3.12,3.13, 3.18, 3.20, 3.30, 3.36	13
21	**Purna**	2006	77° 46' 00" 21° 22' 30"	52.00	41.759	5450	MH09HH1803	Gated	16/05/2021 27/10/2021	3.1,3.2,3.5,3.6,3.9,3.10,3.12,3.13,3. 18,3.21,3.23,3.28,3.303.31,3.36	15
22	**Chargad**	2013	77° 81' 00" 21° 20' 30"	35.38	12.00	1107.5	MH09HH1621	UnGated	16/05/2021 16/12/2021	3.2,3.5,3.7,3.9,3.13,3.18,3.31 3.34,3.36	09
2) Executive Engineer, A.M.P.D, Amravati.											
23	**Sapan**	2010	77° 28' 00" 21° 22' 00"	55.27	39.26	2289	MH09HH2139	Gated	08/06/2021 27/11/2021	3.5,3.10,3.12,3.13,3.17,3.18,3.20,3. 28,3.30,3.31,3.36,	11
3) Executive Engineer, Upper Wardha Dam Dn. Amravati											
24	**Upper Wardha**	1993	78° 03' 00" 21° 16' 18"	53.5	646.86	19457	MH09HH1319	Gated	25/04/2021 12/12/2021	3.1,3.6,3.9,3.11,3.12,3.18, 3.21,3.30,3.31,3.33,3.36	11
4) Executive Engineer, Amravati Irrigation Division, Amravati											
25	**Pak**	2016	----	21.43	10.597	960.10	-----	Gated	25/04/2021 15/12/2021	3.2,3.5,3.6,3.9,3.13,3.20,3.27,3.28, 3.30,3.31.	10
III) Superintending Engineer, B.I.P.C, Buldana **1)** Executive Engineer, Minor Irrigation Div. Buldana											

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
26	**Durgbori**	2019	76° 41' 15" 20° 18' 30"	31.85	2.37	343.17	-----	Ungated	15/05/2021 -------	----------	Nil

Table 3.13

Class-II Dams with Category-1 Deficiency

Sr. No.	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Observation / Significant Deficiencies noticed	Remedial Measures Suggested
1	2	3	4	5	6	7
---------- NIL ----------						

Table 3.14

Class-II Dams with Category-2 Deficiency

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
I)SUPERINTENDING ENGINEER, AKOLA IRRIGATION CIRCLE,AKOLA E.E.B.I.D., Buldana.						
1	Name:-**Godada.** Year of completion :-**1973** Location : - Longitude :-**76o 31' 00**" Latitude :- 21o 05' 45" Height :- 15.64 m. Gross capacity :- 1.89 Mm3 Design Spillway capacity :- **129 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0328** **Dist-Buldana.** **Tal- Jalgaon jamod.**	28/04/2021 27/11/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Earthen Dam W.W & T.C. Curtain Wall	1) Standing pool of water on D/S of dam at chainage 450m to 850m. (A2) 2)Leakage observed on D/S of dam with clear water. Details not given.(A1) 3) Heavy retrogression observed between Rd 0 to 50 m D/s of W.W.bar. (A17)	Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level. ----------do---------- Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
2	Name:- **Rajura** Year of completion :- 1978 Location : - Longitude :- 76o 29' 00" Latitude :- 20o 44' 20" Height :- 17. 73 m. Gross capacity :-3.70 Mm3 Design Spillway capacity :- 532 cumecs	10/05/2021	Shri. S.S.Solanke E.E.B.I.D Buldana	Earth Dam	1) Standing pool of water is observed in gorge portion. (A2)	Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level.
				Tail Channel	2) Guide bund is damaged. (A16)	Repairs to guide bunds should be carried out.
	Sr. No. in National register oflarge Dams 2009) :- **MH09MH0725** **Dist-Buldana.** **Tal- Jalgaon jamod.**	25/11/2021	Shri. S.S.Solanke E.E.B.I.D Buldana	Tail Channel	3) Heavy scouring observed in tail channel 30 m. From W.W. (A7)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
3	Name:-**Mandwa (Bld)** Year of completion :- 1995 Longitude :- 76o 20' 00" Latitude :- 20o 01' 20" Height :- 18052 m. Gross capacity :- 4.10 Mm3 Design Spillway capacity :- 725 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH1374** **Dist-Buldana.** **Tal- Sindkhed Raja.**	23/04/2021 18/10/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Earth Dam Earth Dam Outlet well W.W & T.C.	1) Dam section is not as per designed in respect of top width & level at ch.0 to 120m & 450 to 510m.(B1) 2) Pitching is disturbed through out dam length(B3) 3). Outlet well is damaged. Details not given (A6) 4). Stilling basin is damaged. (A14)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Detailed inspection by field SE should be carried out & necessary repairs should be taken in hand as per instructions. Repairs to outlet well should be carried out. Damaged portion should be repaired.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
4	Name:- **Mas** Year of completion :- 1992 Location : - Longitude :- 76o 39' 45" Latitude :- 20o 36' 15" Height :- 17.71 m. Gross capacity :-17.50 Mm3 Design Spillway capacity :- 942 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH0051** **Dist-Buldana.** **Tal- Khamgaon.**	10/05/2021 26/11/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Earth Dam Earth Dam Earth Dam Outlet Well Waste weir Tail Channel E.D.A Guide Wall Guide Bund	1) Dam section is not as per designed in respect of top width & U/s slope at some places. (B1) 2) Some patches of pitching are heavily disturbed. Details not given(B3) 3) Heavy raincuts observed on embankment. (B4) 4) Jet of water appearing in both well. Details not given (A6) 5). Waste Weir bar mosonary is not in good condition. (B7) 9) Retrogression in tail channel. . Details not given.(A7) 6). Bed concrete of E.D.A. is damaged. (A14) 7) Guide wall & Devide wall are damaged (A16) 8) Guide bund & pitching is heavily disturbed. (B3)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Necessary repairs should be carried out. These should be filled with proper material & necessary compaction should be done. Repairs to outlet well should be carried out. Repairs to Waste Weir bar should carried out to avoid progressive deterioration. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Repairs to bed concrete of E.D.A.should be carried out Repairs to damaged portion of Guide wall & Divide should be carried out Earth work of guide bunds with pitching of disturbed portion should be carried out.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
5	Name:-**Paldhag** Year of completion :- 1974 Longitude :- 76o 18' 03" Latitude :- 20o 35' 45" Height :- 24.06 m. Gross capacity :- 9.09 Mm3 Design Spillway capacity :- 1095 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH0449** **Dist-Buldana.** **Tal- Buldana.**	04/05/2021 25/11/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Earth Dam Tail Channel End weir.	1) Dam section is under section(B1) 2) Settlement & disturbed pitching between RD 90 to 120m & 225 to 360 m. (B3) 3) There is scouring on D/S side of EDA (A7) 4) End sill wall towards left bank collapsed between RD 0 to 60 m & coping in full length is washed away. (A17)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Necessary repairs should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Reconstruction of collapsed end seal wall & coping should be carried out..

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
6	Name:- **Pimpalner** Year of completion :- 1979 Location : - Longitude :- 76o 34' 00" Latitude :- 19o 57' 00" Height :- 16. 30 m. Gross capacity :-2.09 Mm3 Design Spillway capacity :- 453 cumecs Sr. No. in National register of large Dams 2009) :- **MH09MH0784.** **Dist-Buldana.** **Tal- Lonar.**	24/04/2021 08/11/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Earth Dam Waste weir. Tail Channel Tail Channel	1) Dam section is not as per designed in respect of top width & Slopes(B1) 2) U/S &D/S face of bar needs pointing. (B8) 3) Scouring observed on D/S of bar(A17) 4) Retrogression in tail channel. (A7)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Necessary Pointing work should be carried out. Proper remedial measure be taken and scouring be monitored. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
7	Name:- **Torna** Year of completion :- 1992 Location : - Longitude :- 76o 29' 30" Latitude :- 20o 22' 30" Height :- 22.50 m. Gross capacity :- 6.85 Mm3 Design Spillway capacity 1186 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH1378** **Dist-Buldana.** **Tal- Khamgaon**	05/03/2021 01/11/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Outlet	Leakage from conduit observed. Details not given(A4)	Detailed inspection of well and conduit by field SE should be carried out & necessary repairs should be done immediately as per instructions.
8	Name:- **Utawali** Year of completion :- 2005 Location : - Longitude :- 76o 41' 10" Latitude :- 20o 25' 17" Height :- 25.83 m. Gross capacity :- 20.80 Mm3 Design Spillway capacity :- 3740cumecs Sr. No. In National register oflarge Dams 2009) :- **MH09MH1800** **Dist-Buldana.** **Tal- Mehakar.**	03/05/2021 26/11/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Earth dam Earth dam Tail Channel	1) Dam section is as per design except U/S ch.2040 to 2100 m (B1) 2) Settlement of pitching is observed from RD 2040 to 2100 m. (B3) 3) D/S of bar erosion in tail channel is observed. Also erosion near fall @ ch. 165 m. and at sides of check walls @ ch. 340 & 525 m. (A7)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Necessary repairs should be carried out for setteled portion. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
9	Name:- **Kardi** Year of completion :- 1997 Location : - Longitude :- 75o 58' 30" Latitude :- 20o 22' 00" Height :- 15.06 m. Gross capacity :- 5.89 Mm3 Design Spillway capacity :-1085 cumecs Sr. No. in National register oflarge Dams 2009) :- **MH09MH1450** **Dist-Buldana.** **Tal- Buldana.**	09/05/2021 25/10/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Earthen dam Outlet D/S Head Wall Waste Weir Waste Weir	1) Boils observed in main nalla when dam is 100%.(A1) 2) Seepage observed at junction of outlet well & earthwork (A3) 3)In stilling basin between gate No.8 & 10 concrete is eroded (10 X 5 m) (A14) 4) Heavy leakages observed through foundation of w.w. & side of guide wall. Major cracks are observed at the joints of wall & crest needs repairs(B7)	Necessary investigation should be carried out and boiled area shall be kept under observation with respect to reservoir level. Detailed inspection by field SE should be carried out & necessary repairs should be taken in hand as per instructions. Repairs to eroded portion of stilling basin shouldl be carried out. Necessary investigations should be carried out and reffer this problem to C.E, CDO Nashik for getting solution regarding structural repairs.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
10	Name**:- Vidrupa** Year of completion :- 1990 Location : - Longitude :- 76o 19' 56" Latitude :- 19o 59' 42" Height :- 17.85 m. Gross capacity :- 4.56 Mm3 Design Spillway capacity 920 cumecs Sr. No. In National register oflarge Dams 2009) :- **MH09MH1278** **Dist-Buldana.** **Tal- Sindhkhed Raja.**	23/05/2021 16/11/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Earth dam	1) Settlement of pitching at three places between ch. 60 to 460m Details not given (B3)	Pitching to be reset by using stones of adequate weight and size laid over properly graded filter.
11	Name:- **Masrul** Year of completion :- 1998 Location : - Longitude :- **75o56' 30"** Latitude :- **20o 25' 06"** " Height :-**17.70** m. Gross capacity :- 9.51Mm3 Design Spillway capacity :- 1068.81cumecs Sr. No. In National register of large Dams 2009) :- **MH09MH1483** **Dist-Buldana.** **Tal- Buldana**	09/05/2021 25/10/2021	Shri. S.S.Solanke E.E.B.I.D Buldana Shri. S.S.Solanke E.E.B.I.D Buldana	Outlet Well Outlet D/S Head Wall	1)Masonry of HR well is damaged at top.(A6) 2) Leakages at D/S head wall near outlet pipe is observed.(A4)	Necessary repairs for damaged portion should be carried out . Detailed inspection by field SE should be carried out. Necessary investigation of outlet conduit should be carried out, reffer this problem to C.E, CDO Nashik for getting solution regarding structural repairs..

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
EE A.I.D Akola						
12	Name:- **Nirguna** Year of completion :- **1975** Location : - Longitude :- **76° 01' 00"** Latitude :- **20° 21' 00"** Height :- **25.70 m.** Gross capacity :-**32.29 Mm³** Design Spillway capacity :- **1678 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0530** **Dist-Akola.** **Tal- Patur.**	22/05/2021 07/12/2021	Shri C.V.Wakode E.E.A.I.D Akola Shri A.K.Wasulkar E.E.A.I.D Akola	E.D.A Waste weir Guide Bund	1)Coping on end sill is wash away,end sill wall is damage(B7) 2)U/S & D/S face of bar needs pointing (B6) 3)Leakages in 8 places observed in W.W bar.(B7) 4)Guide bund pitching is damaged from RD 000 to 600 m.(B3)	Necessary Repairs for the damaged portion should be carried out. Pointing work should be carried out for required portion. ----------do---------- Necessary repairs should be carried out for damaged portion.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
13	Name:- **Ghota** Year of completion :- **1978** Location : - Longitude :- **77° 18' 00"** Latitude :- **20° 30' 00"** Height :- **15.75 m.** Gross capacity :-**1.65 Mm^3** Design Spillway capacity :- **384 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0711** **Dist-Akola.** **Tal- Barshi Takli.**	19/05/2021 06/12/2021	Shri C.V.Wakode E.E.A.I.D Akola Shri A.K.Wasulkar E.E.A.I.D Akola	Earth dam Waste Weir Waste Weir Guide wall Tail Channel Tail Channel	1) Undulations on top of dam upto 90 cm. at some chainages is obseved. (B3) 2) Masonry of spillway bar damaged. (B7) 3) Coping is damaged. (B7) 4) Guide wall is damaged. (A16) 5)Scouring on the D/S of bar. (A17) 6) Scouring is noticed in tail channel. (A7)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Repairs to damaged portion of masonary should be carried out. Repairs to damaged portion of coping should be carried out. Repairs to damaged portion of guide wall masonary should be carried out. Proper remedial measure be taken and scouring be monitored. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
14	Name:-**Tuljapur** Year of completion :- **1975** Location : - Longitude :- **77° 55' 00"** Latitude :- **20° 27' 00"** Height :-**15.00 m.** Gross capacity :- **0.90 Mm^3** Design Spillway capacity :- **102 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0467** **Dist-Akola.** **Tal- Patur.**	17/05/2021 07/12/2021	Shri C.V.Wakode E.E.A.I.D Akola Shri A.K.Wasulkar E.E.A.I.D Akola	Earth Dam Earth Dam Earth Dam Waste Weir	1)Section of dam is not as per design. Top width is reduced than 3m at many places.(B3) 2)Growth of vegetation is observed on pitched portion.(B3) 3) 1 to 2 cusec leakages noticed near hill on D/S slope @ RD 04m to 50m . (A1) 4)Coping of W.W. bar is damaged at some places(B7)	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Vegetation should be cleared. Detailed inspection by field SE should be carried out. Necessary geological investigation should also be carried out and accordingly measures should be taken in hand as per instruction of higher field authorities. .Repairs to damaged portion of coping should be carried out.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
15	Name:- **Uma** Year of completion :- **1981** Location : - Longitude :- **74° 24' 06"** Latitude :- **20° 35' 30"** Height :- **22.20 m.** Gross capacity :-**14.01 Mm³** Design Spillway capacity :- **1340 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0899** **Dist-Akola.** **Tal- Murtizapur.**	18/05/2021 25/11/2021	Shri C.V.Wakode E.E.A.I.D Akola Shri A.K.Wasulkar E.E.A.I.D Akola	Earthen Dam Tail Channel Tail Channel	1) Junction between embankment and spillway not intact.(A3) 2) Heavy scouring is noticed on D/S of w.w. bar in 500m length ,4to5m depth&10to 30m width. (A17) 3) Curtain wall are damage and washed out. (A7)	Necessary investigation should be carried out and accordingly measures should be taken. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Repairs to curtain wall should be carried out.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
16	Name:- **Pimpalgaon Chambhare.** Year of completion :- **1974** Longitude :- **77° 18' 00"** Latitude :- **20° 30' 00"** Height :- **15. 60 m.** Gross capacity :-**2.53 Mm³** Design Spillway capacity :- **512 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0511.** **Dist-Akola.** **Tal- Barshitakli.**	19/05/2021 19/10/2021	Shri C.V.Wakode E.E.A.I.D Akola Shri A.K.Wasulkar E.E.A.I.D Akola	Outlet Gate Waste Weir EDA Tail Channel	1) Leakage of 10L/S is observed (A4) 2) Masonary of spillway bar and coping damaged at some places. (B7) 3) Damages observed to masonary surface of E.D.A. (A14) 4) Curtain wall @ RD 30m is damaged for 60m length. (B7)	Neccesary repaire should be done with the help of mechanical organisation. Repairs to the damaged portion of masonry & coping should be carried out. Repairs to the damaged portion of masonry surface of EDA should be carried out. Repairs to the damaged portion ofcurtain wall should be carried out. .

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
17	Name:- **Shahapur LMI** Year of completion:-**2017** Location : - Longitude :- **76° 59' 27"** Latitude :- **21° 09' 00"** Height :- **17.13m.** Gross capacity :-**2.27 Mm³** Design Spillway capacity :- **302cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH1470**	23/05/2021 17/11/2021 03/12/2021	Shri C.V.Wakode E.E.A.I.D Akola Shri A.K.Wasulkar E.E.A.I.D Akola Smt S Y Kurhade EE DSD-2	Earthen Dam Earthen Dam Earthen Dam Toe drains	1)Standing pools of water observed on D/S of dam. Details not given (A2) 2)Slushy or boggy ground observed on D/S of dam. Details not given.(A1) As above & 3) Standing pool of water observed on D/S of dam between RD 3300-3500m.It is also observed that open wells & bore wells are flooded with water upto ground level in D/S area 4) Standing pool of water observed in toe drains due to in sufficient gradient.	Detailed investigations and inspections should be made by team of one or more professional, Dam design expert (CDO), Geologist, Hydrologist, Agriculture, Ground water Survey and Development Authority and Dam safety Organisation. Mapping of wet/slushy area and monitoring of water table of wells should be carried out. It should be kept under observation and record should be kept with respect to reservoir water level. Multiple engineering investigations should be carried out. The expert committee should be formed at field Chief Engineer level for suggesting remedial measures / solutions regarding above wet/slushy area observed on downstream. Required gradient shall be maintained.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
EE MID Akola						
18	Name:- **Shahapur MI** Year of completion :- 2018 Longitude :- 78o 34' 00" Latitude :- 20o 10' 00" Height :- 18.61m. Gross capacity :- 2.80 Mm3 Design Spillway capacity :- 210 Sr. No. In National register oflarge Dams 2009) :- **MH09MH1117** **Dist-Akola** **Tal- Akot.**	25/05/2021 30/11/2021	Shri. C V Wakode EE MID Akola Shri. A B Raut EE MID Akola	Earthen Embankment	1) Wet patches are observed between R.D 300m to 900m & also between RD 1200m to 1300m on D/S of dam within 200m from toe of dam. (A1)	Detailed inspection by field SE should be carried out. Necessary geological investigation should also be carried out. If required combined inspection of field CE and CE CDO should also be carried out for getting solution regarding structural repairs.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
(III)S.E. A.I.P.C Amravati E.E. I.P &W.I.D. Amravati						
19	Name:- **Bordinalla** Year of completion :-**2015** Location : - Longitude **77° 59' 09"** Latitude :-**21°24' 00"** Height :- **18 m.** Gross capacity :-**5.91 Mm³** Design Spillway capacity :- **594.80 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09LH2216**	15/05/2021 28/11/2021	Shri S.G.Rathi E.E.I.P.&W..I.D Amravati Shri S.G.Rathi E.E.I.P.&W..I.D Amravati	Outlet	1) Minor new cracks are observed beside previously seen cracks in settlement area of D/S counduit raft after august 2016. Settlement in sag portion of conduit is increased upto some extent. Details not given (A6)	Combined inspection of field CE and CE CDO should be carried out for getting solution regarding structural repairs.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
CHIEF ENGINEER, (W.R.),Amravati (III)SUPERINTENDING ENGINEER, YAVATMAL IRRIGATION CIRCLE (M) E.E. Y.I.D. Yavatmal						
20	Name:- **Anji** Year of completion :- 1984 Longitude :- 78o 34' 00" Latitude :- 20o 10' 00" Height :- 20.32m. Gross capacity :- 2.80 Mm3 Design Spillway capacity :- 210 Sr. No. In National register oflarge Dams 2009) :- **MH09MH1117** **Dist-Yavatmal** **Tal- Ralegaon.**	27/05/2021	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal	Tail Channel	1) Bed concrete of fall is damaged (A7)	Necessary repairs to the damaged bed concrete of fall should be carried out.
		07/01/2022	Smt. A.A.Jadhav E.E.Y.I.D. Yavatmal	Tail Channel	2)End sill wall of 1st fall is damaged.Masonry of 2nd fall for about 50 m length is damaged. Masonry of 3rd fall & end sill wall is washed out. (A16)	Necessary repairs to damaged masonry of end sill walls and falls should be carried out.
				Tail Channel	3)Heavy retrogression in tail channel between first, second and third fall. (A7)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.
		11/01/2022	Smt S Y Kurhade EE.DSD-2		As above & 4) Longitudinal cracks of approximate width 1 cm to 3 cm are observed at some places, in absence of chainage stones exact locations could not be defined.	Maintain the record of length, width and depth. Please refer this problem to Hon. CE, CDO, Nashik with required data to carry out remedial measures as early as possible.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
21	Name:- **Deogaon** Year of completion :- **1985** Location : - Longitude :- **78° 50' 00"** Latitude :- **19° 40' 00"** Height :- **15.91 m.** Gross capacity :-3**.63 Mm³** Design Spillway capacity :- **443 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0187** **Dist-Yavatmal** **Tal- Arni**	28/05/2021 31/12/2021	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Smt. A.A.Jadhav E.E.Y.I.D. Yavatmal	W.W bar	1) There is scouring of left flank in tail channel & weather rock is collapsing on flank wall Construction of left side guide wall is necessary.(A16)	Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand
22	Name:- **Dudhana** Year of completion :- **1977** Location : - Longitude :- **78° 50' 00"** Latitude :- **19° 40' 00"** Height :- **15.20 m.** Gross capacity :-3**.63 Mm³** Design Spillway capacity :- **443 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0187** **Dist-Yavatmal** **Tal- Ghatanji**	23/05/2021 27/12/2021	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Smt. A.A.Jadhav E.E.Y.I.D. Yavatmal	Earthen Embankment	1) Heavy leakages on D/S when dam is full.Details not given. (A2)	Combined inspection of field CE & SE should be carried out for getting solution regarding structural repairs.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
23	Name:- **Durug** Year of completion:-**1968** Location : - Longitude :- **76° 59' 27"** Latitude :- **21° 09' 00"** Height :- **15.54m.** Gross capacity :-**2.27 Mm³** Design Spillway capacity :- **302cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH1470** **Dist-Yavatmal** **Tal- Kalamb**	13/05/2021 11/01/2022 11/01/2022	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Smt A.A.Jadhav E.E.Y.I.D. Yavatmal Smt.S Y Kurhade EE DSD-2	HR Well Outlet W.W.& Tail Channel	1) Horizontal cracks are observed on outlet well. (A6) 2) Junction between outlet & earthwork not properly protected. As above and 3) Waste wrie bar for length about 4 to 5 m is totally damage / washed away. Pointing on U/s & D/s face is detroited at some places, bed concrete of fall is also damaged for some length.	Neccesary repaire should be carried out. Detailed inspection by field SE should be carried out. and accordingly measures should be taken in hand as per instruction of higher field authorities. Neccesary repaire should be carried out.
24	Name:- **Kapara** Year of completion :- **1984** Location : - Longitude :- **78°07' 00"** Latitude :- **20°08' 00"** Height :- **20.36 m.** Gross capacity :-**2.80 Mm³** Design Spillway capacity :- **209.5 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0904**	13/05/2021 10/01/2022 10/01/2022	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Smt A.A.Jadhav E.E.Y.I.D. Yavatmal Smt S Y Kurhade EE DSD-2	Outlet Gate Outlet well	1) Outlet gate does not open & closed smoothly. Stem rod is bend/ damaged.(B5) 2) L/S Wall of Outlet well collapsed at foundation level .(A6) As above. 3) It is observed that Left side wall of head regulator above foundation for approximate 2.00m height is damaged on large scale and slab above the walls also damaged. Cracks are developed between slab and wall.	Neccesary repaire should be done with the help of mechanical organisation. Necessary remedial measures should be carried out on top priority by approval and under guidance of competent authority.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
25	Name:- **Nignoor** Year of completion :- **1969** Location : - Longitude :- **78° 50' 00"** Latitude :- **19° 40' 00"** Height :- **18.46 m.** Gross capacity :-3**.63 Mm³** Design Spillway capacity :- **443 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0187** **Dist-Yavatmal** **Tal- Umerkhed.**	04/05/2021 21/11/2021	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Shri. A.A.Jadhav E.E.Y.I.D. Yavatmal	Earth Dam Waste weir	1) At RD 450 to 700 m.heavy seepage of water through earthen dam is observed. Details not given(A1) 2) Foundation is opened and cavitation below foundation is observed @ R.D.20 m to 25m and stone are dislocated .(B7)	Detailed inspection by field SE should be carried out. The path of seepage / leakage shall be investigated & if it is piping,immediate repairs should be carried out. If required combined inspection of field CE and CE CDO should be carried out for getting solution regarding structural repairs. Neccesary repairs to Waste weir masonry should be carried out.
26	Name:- **Pendhari** Year of completion :- **1977** Location : - Longitude :- **78° 50' 00"** Latitude :- **19° 40' 00"** Height :- **15.65m.** Gross capacity :-3**.63 Mm³** Design Spillway capacity :- **443 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH0187** **Dist-Yavatmal** **Tal- Malegaon**	10/05/2021 31/12/2021	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Shri. A.A.Jadhav E.E.Y.I.D. Yavatmal		1) Standing pool of water near rock toe. Detail not given.(A2) 2) Noise of falling water in pipe is heard. It should be detected.(A4)	Detailed inspection by field SE should be carried out. and accordingly measures should be taken in hand as per instruction of higher field authorities.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
27	Name:- **Singandoh** Year of completion :- 1993 Location : - Longitude :- 78o 58' 00" Latitude :- 20o 24' 06" Height :- 17m. Gross capacity :- 3.13 Mm3 Design Spillway capacity :- 686 Sr. No. In National register oflarge Dams 2009) :-**MH09MH1310** **Dist-Yavatmal** **Tal- Mer**	25/05/2021 10/01/2022 10/01/2022	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Shri. A.A.Jadhav E.E.Y.I.D. Yavatmal Smt S.Y.Kurhade EE DSD-2	Earth Dam EDA EDA	1) Settlement of dam top by 30 cm through out dam length. (B3) 2) End sill wall is damaged and washout in 30m lenght. (A17) 3) Stilling basin is damaged. (A14) 4) Leakages are observed @15 m from right flank wall. Details not given.(B7). As above & 5) Fall at RD 150m & RD 210m are damaged	Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is setteled or not. Then restored for designed profile. Necessary repairs of damaged portion should be carried out. Necessary repairs of damaged portion should be carried out. Neccesary repaire should be carried out. Necessary repairs of damaged portion should be carried out.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
28	Name:- **Waghadi** Year of completion :- 1978 Location : - Longitude :- 78o 18' 10" Latitude :- 20o 15' 30" Height :- 26.00 m. Gross capacity :- 41.11 Mm3 Design Spillway capacity :-1815 cumecs Sr. No. in National register oflarge Dams 2009) :-**MH09MH0739** **Dist-Yavatmal** **Tal- Yavatmal.**	23/05/2021 27/12/2021	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Shri. A.A.Jadhav E.E.Y.I.D. Yavatmal	Earth Dam	1) Settlement of pitching from RD 150m to RD 800m, RD 1215 to 1470 & 1500 to 1600 m is observed(B3)	Pitching to be reset by using stones of adequate weight and size laid over properly graded filter.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
29	Name:- **Vihirgaon** Year of completion :- 1992 Location : - Longitude :- 78o 30' 00" Latitude :- 20o 38' 00" Height :- 15.54m. Gross capacity :- 3.17 Mm3 Design Spillway capacity :- 226 Sr. No. In National register oflarge Dams 2009) :- **MH09MH1289** **Dist-Yavatmal** **Tal- Ralegaon.**	11/05/2021 11/01/2022	Shri. A.N.Khandare E.E.Y.I.D. Yavatmal Smt. A.A.Jadhav E.E.Y.I.D. Yavatmal	Earthen Dam Outlet Conduit Outlet gate Fall Tail Channel	1) Wet patches are observed on D/S of dam @30m from rock toe (A1) 2) Leakage of water through pipe joint. Seepage or piping around the junction.(A4) 3) Stem rod is bent .unusual noise during operation. (B5) 4) Bed concrete of fall is damaged(A7) 5) Retrogression in tail channel on D/S of fall and foundation of end sill wall is opened. (A7)	Necessary invistagations should be carried out. Try to drain out water through ditches and it should be kept under observation with respect to reservoir level. Detailed inspection by field SE should be carried out. Necessary investigation of outlet conduit should be carried out, reffer this problem to C.E, CDO Nashik for getting solution regarding structural repairs. Neccesary repaire should be carried out with the help of mechanical organisation. Necessary repairs to the damaged bed concrete of fall should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.
		11/01/2022	Smt S.Y.Kurhade EE DSD-2		As above & 6)Minor leakages were observed from the ends of D/s head wall of head regulator,	Detailed inspection by field SE should be carried out. Necessary investigation of outlet conduit should be carried out, reffer this problem to C.E, CDO Nashik for getting solution regarding structural repairs.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
SE Buldana Irrigation Project Circle **EE Minor Irrigation Div. Buldana**						
30	Name:- **Lower Dnyanganga** Year of completion :- **2000** Location : - Longitude :- **78º 31' 50"** Latitude :- **29º 19' 25"** Height :- **16.05 m.** Gross capacity :-**2.86 Mm³** Design Spillway capacity :- **185.97 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH2150** **Dist- Yavatmal.** **Tal- Zari Zamni.**	15/05/2021 11/10/2021 02/12/2021	Shri P P Sant EE MID Buldana Smt S Y Kurhade EE DSD-2	Earthen Embankment	1)Dam ch 2940m slushy ground seen in gut No.446 on D/S side of dam & near gorge portion D/S of dam, water seepage in gut no. 166 but it is due to dam seepage or rising ground water table is need to confirm.(**A2**) As above & down stream area on right flank, approximately upto 300m. was thoroughly inspected. It is observed that most of wells (Total 26 wells, reported by field officer) in that area were flooded upto ground level and most of land area was wet / slushy. It is also observed that well in survey no 166 of Nimkawala village (D/s of dam Rd 2940m.) was overflow and near by area was totally slushy, very difficult to walk.	Mapping of wet/slushy area and monitoring of water table of wells should be carried out. It should be kept under observation and record should be kept with respect to reservoir water level. Multiple engineering investigations should be carried out. The expert committee should be formed at field Chief Engineer level for suggesting remedial measures / solutions regarding above wet/slushy area observed on downstream.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
EE Arunavati project division, Digras						
31	Name:- **Satpalli** Year of completion :- **2000** Location : - Longitude :- **78° 31' 50"** Latitude :- **29° 19' 25"** Height :- **16.05 m.** Gross capacity :-**2.86 Mm³** Design Spillway capacity :- **185.97 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH2150** **Dist- Yavatmal.** **Tal- Zari Zamni.**	22/05/2021	Shri K.K.Akulwar EE Arunavati project division Digras	Tail Channel End Weir	1) Spill channel guide bund is damaged to very large extent. (A7) 2) End sill wall of W.W. is damaged. (A17)	Necessary repairs to damaged portion of guide bund should be carried out. Necessary repairs to damaged portion of end sill wall should be carried out.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
IV) SUPERINTENDING ENGINEER, YAVATMAL IRRIGATION Project CIRCLE E.E.Y.P.C.D, Yavatmal						
32	Name:- **Dahegaon** Year of completion :- **2016** Location : - Longitude :- **77° 50' 00"** Latitude :- **20° 50' 00"** Height :- **17.35 m.** Gross capacity :- **1.53 Mm³** Design Spillway capacity :- **193cumecs** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0275** **Dist-Ralegaon**	21/05/2021 23/11/2021	Shri N G Bansode E.E.Y.P.C.D, Yavatmal Shri N G Bansode E.E.Y.P.C.D, Yavatmal		1) R/S Outlet well is not in good condition. Leakages through HR well concrete is observed during repairing work. Details not given. (A6)	Detailed inspection by field SE should be carried out. & accordingly necessary repairs should be carried out as per the instructions.
IV) SUPERINTENDING ENGINEER, YAVATMAL IRRIGATION Project CIRCLE E.E. M.I.D.,Pusad						
33	Name:- **Kali (D)** Year of completion :- **2007** Location : - Longitude :- **77° 42' 52"** Latitude :- **19° 56' 19" .** Height :- **15.32 m.** Gross capacity :-**4.50 Mm³** Design Spillway capacity :- **489.19 cumecs** Sr. No. in National register oflarge Dams 2009) :- **MH09MH2151** **Dist-Yavatmal** **Tal- Mahagaon.**	No date	Shri A.K.Wasulkar E.E.MID Pusad Yavatmal	Earth dam Earth dam	1) Water logged area on R/S of left bank canal on 100 to 150 m on D/S of dam. (A1) 2) There are wet patches water seepage on the D/S of dam @ 20m from toe.(A1) .	Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level Necessary invistagations should be carried out. Try to drain out stagnant water through ditches and it should be kept under observation with respect to reservoir level

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
34	Name:- **Amadapur** Year of completion :- **2005** Location : - Longitude :- **77° 55' 49"** Latitude :-:- **20° 40' 48"** Height :- **17.40 m.** Gross capacity :- **14.83 Mm^3** Design Spillway capacity :- **796 cumecs** Sr. No. in National register oflarge Dams 2009) :- **- MH09MH2155** **Dist-Yavatmal** **Tal- Umerkhed.**	13/05/2021	Shri A.K.Wasulkar E.E.MID Pusad Yavatmal	Outlet Well Waste weir	1) Outlet well is horizontly cracked. (A6) 2) Leakage observed through waste weir masonry wall (B7)	Necessary repairs to damaged portion of outlet well should be carried out. Necessary repairs to damaged portion of waste weir masonry should be carried out.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
V)SUPERINTENDING ENGINEER, UPPER WARDHA PROJECT CIRCLE, AMRAVATI E.E.M&M.I.D. Achalpur						
35	Name:- **Basalapur** Year of completion :- **1972** Location : - Longitude :- **77° 50' 00"** Latitude :- **20° 50' 00"** Height :- **17.85 m.** Gross capacity :- **1.53 Mm^3** Design Spillway capacity :- **193cumecs** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0275** **Dist-Amravati**	21/05/2021 04/12/2021	Shri P.A.Gole E.E.M&M.I.D. Achalpur Shri A.A.Sawant E.E.M&M.I.D. Achalpur	Outlet	1) Nearly 1.2 m deep half upper part of well from central cross girder is dislocated. (A6)	Necessary repairs to damaged portion of outlet well should be carried out.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
36	Name:- **Bhivapur** Year of completion :- **1979** Location : - Longitude :- **77° 55' 49"** Latitude :-:- **20° 40' 48"** Height :- **17.90 m.** Gross capacity :- **14.83 Mm^3** Design Spillway capacity :- **796 cumecs** Sr. No. in National register oflarge Dams 2009) :- **- MH09MH2155** **Dist-Amravati** **Tal- Tiwasa**	21/05/2021 04/12/2021	Shri P.A.Gole E.E.M&M.I.D. Achalpur Shri A.A.Sawant E.E.M&M.I.D. Achalpur	WW Bar and Tail channel	1) Spillway bar is damaged due to heavy rain. There are heavy leakages through masonry bar & EDA foundation damages are also observed in EDA .(B7) 2) There is scouring on D/S side of the waste weir bar & EDA.(A7) 3) Waste weir is on the verge of breach, eroded portion reach upto WW bar . Need to be repair immediately. (B7,A7)	Detailed inspection by field SE should be carried out & accordingly protective measures should be taken in hand. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand. Detailed inspection by field SE should be carried out & accordingly protective measures should be taken in hand.

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
37	Name:- **Mandwa (AMT)** Year of completion :- **1973** Location : - Longitude :- **76° 47' 00"** Latitude :- **21° 45' 00"** Height :- **17.52 m.** Gross capacity :- **1.37 Mm³** Design Spillway capacity :-**154 cumecs** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0573** **Dist-Amravati.** **Tal- Dharni.**	25/05/2021 12/02/2022	Shri P.A.Gole E.E.M&M.I.D. Achalpur Shri A.A.Sawant E.E.M&M.I.D. Achalpur	Outlet Gate Outlet Gate Waste weir Waste weir Waste weir Waste weir	1) Outlet gate does not open & close smoothly. (B5) 2) Leakage through gate or from slots in closed position(A4) 3) Coping on W.W.bar is washed out. (B7) 4) U/S & D/S/ face of W.W. bar need pointing. (B8) 5)Scouring on d/s side of bar (A17) 6) Retrogression observed in tail channel near curtain wall. (A7)	Neccesary repaire should be carried out with the help of mechanical organisation. Neccesary repaire should be carried out with the help of mechanical organisation. Necessary repairs to damaged portion of coping should be carried out. Necessary repairs to damaged portion of pointing should be carried out. Necessary repairs to the scoure portion of bar should be carried out. Necessary geological investigations should be carried out & accordingly protective measures should be taken in hand.
38	Name:- **Sakhali Nala** Year of completion :- **1973** Location : - Longitude :- **77° 43' 00"** Latitude :- **20° 33' 00"** Height :- **18.50m.** Gross capacity :- **7.26 Mm³** Design Spillway capacity :- **952.60 cumecs** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0839** **Dist-Amravati.** **Tal- Ner.**	20/05/2021 11/12/2021	Shri P.A.Gole E.E.M&M.I.D. Achalpur Shri A.A.Sawant E.E.M&M.I.D. Achalpur	Outlet Gate Outlet gate Outlet gate	1) Outlet gate does not open smoothly & Unusual noise during operation. (B5) 2) Leakages observed through gate.(B12) 3) Stem rod not straight. (B5)	Neccesary repaire should be carried out with the help of mechanical organisation. Neccesary repaire should be carried out with the help of mechanical organisation Neccesary repaire should be carried out with the help of mechanical organisation

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
EE. Amravati Irrigation Division, Amravati						
39	Name:- **Songaon Shivani LMI** Year of completion :- **2015** Longitude :- 77º 58' 34" Latitude :- 20º 46' 06" Height :- **15.60m.** Gross capacity :- **8.516 Mm³** Design Spillway capacity :- **cumecs** Sr. No. In National register oflarge Dams 2009) :- **MH09MH2172** **Dist-Amravati.** **Tal- Chandur.**	20/01/2022	Shri S.P.Ade EE AID, Amravati.	Earthen Embankment	1) Seepage & water logging when dam storage 45% conditions to D/S side of dam observed @ RD 900 to 2000m. (A1)	Mapping of wet/slushy area and monitoring of water table of wells should be carried out. It should be kept under observation and record should be kept with respect to reservoir water level. Multiple engineering investigations should be carried out. The expert committee should be formed at field Chief Engineer level for suggesting remedial measures / solutions regarding above wet/slushy area observed on downstream.
40	Name:- **Chandas Wathod** Year of completion :- **2018** Location : - Longitude :- **78º 20' 30"** Latitude :- **21º 27' 15"** Height :- **22.56 m.** Gross capacity :- **12.3696 Mm³** Design Spillway capacity :- **cumecs** Sr. No. In NRLD 2009) :- **MH09MH2167** **Dist-Amravati.** **Tal- Warud**			Earthen Embankment	1) Water seepage occur in near by farmland from RD 700 to 1450 & RD 1860 to 3160, well near RD 1350m is at 60cm below ground level.(A1)	Mapping of wet/slushy area and monitoring of water table of wells should be carried out. It should be kept under observation and record should be kept with respect to reservoir water level. Multiple engineering investigations should be carried out. The expert committee should be formed at field Chief Engineer level for suggesting remedial measures / solutions regarding above wet/slushy area observed on downstream.

Table 3.15

Class-II Dams with Category-3 Deficiency

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm³	Design Spillway Capacity m³ / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
A) Chief Engineer ,(S.P), Amravati. **I) Superintending Engineer, Akola Irrigation Circle Akola.** **1) Executive Engineer, Buldana Irrigation Division, Buldana.**											
1	Borkhedi	2014	76° 33' 30" 20° 04' 00"	15.94	8.14	795	MH09MH2141	Ungated	26/04/2021 28/10/2021	3.5,3.16,3.19	03
2	Godada	1973	76° 31' 00" 21° 05' 45"	15.64	1.89	129	MH09MH0328	Ungated	28/04/2021 27/11/2021	3.1,3.2,3.5,3.6,3.9,3.19,3.20,3.22	07
3	Rajura	1978	76° 29' 00" 20° 44' 20"	17.73	3.70	532	MH09MH0725	Ungated	10/05/2021 25/11/2021	3.5,3.7,3.9,3.16,3.20,3.21,3.22,3.35	08
4	Mandwa(Bld)	1995	76° 20' 00" 20° 01' 20"	18.52	4.10	725	MH09MH1374	Ungated	23/04/2021 18/10/2021	3.5,3.9,3.16,3.20	04
5	Mas	1992	76° 39 45" 20° 36' 15"	17.71	17.50	942	MH09MH0051	Ungated	10/05/2021 26/11/2021	3.5,3.9,316,3.22	04
6	Paldhag	1974	76° 18' 03" 20°35' 45"	24.06	9.09	1095	MH09MH0449	Ungated	04/05/2021 25/11/2021	3.9,3.10.	02
7	Pimplener	1979	76° 34' 00" 19° 57' 00"	16.30	2.09	453	MH09MH0784	Ungated	24/04/2021 08/11/2021	3.7,3.9,3.20,3.22,3.34,3.35	06
8	Brahmanwada	1995	76° 29' 30" 20° 22' 30"	23.70	6.85	1186	MH09MH1378	Ungated	07/05/2021 18/11/2021	3.5,3.6,3.16,3.19,3.20,3.28	06
9	Kardi	1997	75° 58' 30" 20° 22' 00"	15.06	5.89	1085	MH09MH1450	gated	09/05/2021 25/10/2021	3.5,3.9,3.16,3.19,3.20,3.35	06
10	Vidrupa	1990	76° 19' 56" 19° 59'42"	17.85	4.56	920	MH09MH1278	Ungated	23/05/2021 16/11/2021	3.5,3.9,3.16,3.19,3.22,3.34	06
111	Utawali	2005	76° 41' 10" 20° 25' 17"	25.83	20.80	3740	MH09MH1800	Ungated	03/05/2021 26/11/2021	3.5,3.9,3.20	03
12	Dhanora	1969	76° 27' 45" 21° 07' 00"	19.24	0.978	168	MH09MH0177	Ungated	28/04/2021 27/11/2021	3.2,3.5,3.7,3.9,3.16,3.20,3.22.	07
13	Fattepur	1978	76° 35' 00" 20° 29' 00"	15.40	1.78	242	MH09MH0620	Ungated	07/05/2021 28/11/2021	3.5,3.7,3.9,3.13,3.19	05
14	Gandhari	1976	76° 38' 00" 19° 52' 00"	18.03	2.41	249	MH09MH0568	Ungated	22/05/2021 08/10/2021	3.2,3.5,3.9,3.16,3.20	05

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
15	Garkhed	1970	76º 13' 35" 19º 30' 00"	16.19	2.16	323	MH09MH0209	Ungated	28/04/2021 18/10/2021	3.5,3.9,3.13,3.16, 3.19,3.20,3.21,3.22,3.34	09
16	Kalmeshwar	1998	75º 29' 00" 20º 16' 00"	16.09	1.45	181	MH09MH1463	Ungated	24/05/2021 17/10/2021	3.1,3.9,3.16,3.17,3.34	05
17	Koradinalla	1980	76º 30' 22" 20º 12' 43"	19.31	22.08	2496	MH09MH0798	Ungated	22/05/2021 22/11/2021	3.5,3.7,3.9,3.16,3.20,3.21,3.34	07
18	Keshav shivani	1983	76º 21'45" 20º 35' 00"	16.10	2.38	464	MH09MH0994	Ungated	26/05/2021 13/10/2021	3.2,3.5,3.7,3.9,3.16,3.20,3.34	07
19	Nimkhed	1970	76º 36' 00" 20º 00' 00"	21.30	3.07	631	MH09MH0220	Ungated	29/05/2021 18/11/2021	3.5,3.6,3.7,3.16,3.19	05
20	Pangarkhed	1985	76º 47' 15" 20º 16' 15"	20.58	1.47	219	MH09MH1575	Ungated	26/04/2021 28/10/2021	3.5,3.9,3.21,3.22,3.34	07
21	Shivnijat	1973	76º 35' 55" 19º 53' 53"	15.90	1.48	208	MH09MH0346	Ungated	22/05/2021 18/10/2021	3.5,3.7,3.9,3.16,3.20	03
22	Tambola	1979	76º 27' 00" 19º 59' 15"	15.76	1.69	247	MH09MH0763	Ungated	22/05/2021 18/10/2021	3.5,3.9,3.16,3.19,3.20,3.21,3.22	07
23	Titwi	1972	76º 32' 33" 19º 54' 30"	19.55	3.11	429	MH09MH0299	Ungated	22/05/2021 18/10/2021	3.1,3.5,3.9,3.16,3.20,3.21,3.34	07
24	Torna	1993	76º 42' 45" 20º 27' 30"	23.00	8.48	961	MH09MH1315	Ungated	16/05/2021 01/11/2021	3.7,3.9,3.16,3.21,3.22,3.33	06
25	Dhorapgaon	2005	76º 24' 30" 20º 27' 40"	18.65	6.64	680	MH09MH2154	Ungated	18/05/2021 01/11/2021	3.5,3.9,3.20,3.22,3.28	05
26	Masrul	1998	75º 56' 30" 20º 25' 06"	17.69	9.51	1069	MH09MH1483	Ungated	09/05/2021 25/10/2021	3.5,3.7,3.9,3.16,3.20,3.21,3.32	06
27	Warwand	2009	76º 17' 28" 20º 30' 52"	17.19	1.70	397	MH09MH2140	Ungated	08/05/2021 26/10/2021	3.2,3.9,3.20,3.21,3.28,3.34	06
28	Vyaghranalla	1992	76º 3' 30" 20º 41' 15"	15.14	8.40	1063	MH09MH1299	Ungated	04/05/2021 25/11/2021	3.5,3.9,3.16,3.20,3.22,3.28	06
2) Executive Engineer Akola Irrigation Division, Akola											
29	Nirguna	1975	76º 01' 00" 20º 21' 00"	25.70	32.29	1678	MH09MH0530	Ungated	17/05/2021 05/12/2021	3.5,3.9,3.20,3.22	04
30	Ghota	1978	77º 18' 00" 20º 30'00"	15.75	1.65	384	MH09MH0711	Ungated	19/05/2021 19/10/2021	3.5,3.9,3.19,3.20,	04

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
31	Tuljapur	1975	77° 55' 00" 20° 27' 00"	15.00	0.90	102	MH09MH0467	Ungated	17/05/2021 07/12/2021	3.9,3.19,3.20,3.22,3.34	06
32	Uma	1981	74° 24' 06" 20° 35' 30"	22.20	14.01	1340	MH09MH0899	Ungated	18/05/2021 25/11/2021	3.3,3.6,3.7,3.13,3.16,3.19,3.20,3.22,3.34	09
33	Patur	1998	76° 55'00" 20° 24'00"	23.25	2.07	262	MH09MH1362	Ungated	02/05/2021 05/12/2021	3.6,3.19	02
34	Pimpalgaon chambhare	1974	77° 18' 00" 20° 30' 00"	15.60	2.53	512	MH09MH0511	Ungated	26/05/2021 12/01/2021	3.5,3.9, 3.16,3.19,3.20.	05
35	Morna	1971	76° 59' 57" 20° 25' 15"	28.65	44.74	1631	MH09MH0266	Ungated	02/05/2021 05/12/2021	3.7,3.9,3.16,3.19,3.20,3.28	06
36	Mozari	1978	77° 20' 00" 19° 54' 00"	16.49	3.26	569	MH09MH0640	Ungated	18/05/2021 12/01/2021	3.7,3.9,3.16,3.19	04
37	Shivan (kd)	1995	77° 26' 00" 20° 38' 00"	15.77	4.66	475	MH09MH1367	Ungated	18/05/2021 25/11/2021	Nil	00
38	Vishwamitri	1990	76° 59' 00" 20° 06' 00"	18.56	15.27	1274	MH09MH1410	Ungated	22/05/2021 07/12/2021	3.6,3.5,3.7,3.9,3.20	05
39	Shahapur LMI	2017		17.13			MH09MH2237	Ungated	23/05/2021 17/11/2021	3.3,3.5,3.7,3.9,3.22	05
3) Executive Engineer, Minor Irrigation Division, Akola.											
40	Shahapur	2018	77°0' 23" 21°11' 34"	18.61	3.44	344	MH09MH2235	Ungated	25/05/2021 30/11/2021	Nil	00
II) SUPERINTENDING ENGINEER, Washim Irrigation Circle, Washim. **1) Executive Engineer, Washim Irrigation Division, Washim**											
41	Upper Morna	2005	77° 55' 49" 20° 40' 48"	17.40	14.83	796	MH09MH2142	Ungated	01/05/2021	3.5,3.6,3.7,3.9,3.16,3.19,3.20,3.21,3.34	09
42	Bramhanwada	1995	76° 29'30" 20° 22' 30"	23.70	6.85	1186	MH09MH1493	Ungated	01/05/2021	3.9,3.19,3.20.	03
43	Davha	2007	77° 02' 37" 20° 17' 57"	17.29	1.57	173	MH09MH2144	Ungated	01/05/2021	3.1,3.5,3.7,3.9,3.16,3.19	06
44	Ekburji	1964	77° 05' 00" 20° 02' 00"	23.70	14.10	1001	MH09MH0096	Ungated	09/05/2021	3.9,3.16,3.19,3.20,3.34	05

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm³	Design Spillway Capacity m³ / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
45	Kalmeshawar	1995	76º 55' 15" 20º 15' 00"	17.82	5.22	512	MH09MH1463	Ungated	25/04/2021	3.1,3.5,3.9,3.16,3.20,3.35.	06
46	Motsawanga	1975	77º 15' 00" 20º 07' 00"	21.00	4.68	737	MH09MH0518	Ungated	02/05/2021	3.2,3.7,3.9,3.20.	04
47	Sonal	1981	76º 12' 00" 20º 19' 00"	19.00	20.27	1365	MH09MH0901	Ungated	05/05/2021	3.1,3.9,3.20	03
48	Januna Sonwal	2009	77º 15' 20" 20º 13' 00"	23.12	3.26	282.49	MH09MH2145	Ungated	02/05/2021	3.20,3.22	02
49	Bramha	2012	77º 14' 30" 20º 02' 33"	18.84	1.82	115.13	MH09MH2148	Ungated	08/05/2021	3.9,3.20,3.22.	03
50	Bhildongar	2012	77º 27' 07" 20º 11' 19"	18.91	1.36	114.39	MH09MH2149	Ungated	04/05/2021	3.5,3.6,3.7,3.9	04
51	Adol	1989	76º 46' 20" 20º 24' 30"	18.56	11.23	1274	MH09MH1249	Ungated	25/04/2021	3.1,3.6,3.9,3.16,3.22	05
52	Panchala	2018	77º 09' 37" 20º 03' 36"	17.17	2.1200	115.12	----------	Ungated	08/05/2021	3.20	01
53	Falegaon	2016	77º 11' 44" 20º 03' 44"	16.50	1.6963	135	----------	Ungated	08/05/2021	3.22	03
54	Shelgaon	2018	77º 56' 18" 20º 29' 06"	18.32	2.6921	246	----------	Ungated	08/05/2021	Nill	00
55	Ganeshpur barrage	2015	77º 05' 24" 19º 56' 48"	14.85	3.0840	7751.85	----------	Ungated	15/05/2021	3.1,3.20,3.22,3.28,3.34	05
56	Kokalgaon Barrage	2015	77º 06' 19" 20º 21' 15"	16.86			----------	Ungated	15/05/2021	3.1,3.9,3.20,3.28,3.34	05
57	Warud Barrage	2016	77º 12' 02" 19º 59' 24"	15.70	2.70	6820	----------	Ungated	18/04/2021	3.1,3.9,3.20,3.28,3.34	05
58	Jumada Barrage	2016	77º 02' 24" 20º 00' 08"	14.85	3.3590	7302.01	----------	Ungated	18/04/2021	3.1,3.9,3.20,3.28,3.34	05
59	Rajgaon Barrage	2016	77º 09' 24" 19º 57' 52"	16.84	2.4120	-------	----------	Ungated	24/04/2021	3.1,3.9,3.20,3.28,3.34	05
60	Ukali Barrage	2016	77º 12' 02" 19º 59' 24"	17.40	2.8320	7943.50	----------	Ungated	21/04/2021	3.1,3.9,3.20,3.28,3.34	05

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm³	Design Spillway Capacity m³ / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
61	Songavhan Barrage	2016	77º 12' 19" 19º 59' 24"	16.61	3.3180	8031.68	----------	Ungated	17/04/2021	3.1,3.9,3.20,3.28,3.34	05
62	Tanka Barrage	2016	77º 10' 11" 19º 56' 18"	18.00	2.4270	-----	----------	Ungated	17/04/2021	3.1,3.9,3.20,3.28,3.34	05
63	Dhilli Barrage	2016	77º 14' 38" 19º 54' 08"	16.30	3.6720	8231.57	----------	Ungated	17/04/2021	3.1,3.9,3.20,3.28,3.34	05
64	Jaypur Barrage	2016	77º 16' 19" 19º 05' 15"	14.37	2.8780	8316.68	----------	Ungated	17/04/2021	3.1,3.9,3.20,3.28,3.34	05
65	Adgaon Barrage	2015	77º 06' 19" 20º 21' 15"	16.65			----------	Ungated	15/05/2021	3.1,3.9,3.20,3.28,3.34	05
2) Executive Engineer, Minor Irrigation Division.(Construction) Washim											
66	Kuttardoh	2012	77º 06' 19" 20º 21' 15"	17.98	2.22	230	MH09MH2143	Ungated	12/05/2021	3,19,3.22,3.23	03
67	Jaipur	2019	77º 16' 00" 19º 56' 00"	22.06	8.56	1010.90	MH09MH2238	Ungated	12/05/2021 01/03/2022	3.5,3.9	02
68	Surkhandi	2013	77º10' 30" 20º 04' 33"	16.05	2.45	343.61	MH09MH2232	Ungated	07/05/2021 29/11/2021 01/03/2022	3.5,3.9,3.20,3.21,3.22,3.23	06
69	Chaktirth	2011	77º03' 20" 20º 18' 01"	20.80	6.993	1290	----------	Ungated	19/05/2021 27/02/2022	3.5,3.7,3.19,3.20,3.23,3.34	06
70	Wara	2015	77º 06' 19" 20º 06' 38"	16.30	10.14	1465	----------	Ungated	19/05/2021 01/03/2022	3.5,3.23	02
71	Pangrabandi	2018	77º 17' 37" 20º 25' 26"	16.62	7.819	755	----------	Ungated	19/05/2021 27/02/2022	Nill	Nill
3) Executive Engineer, Minor Irrigation Division . Karanja lad											
72	Dastapur	2008	77º 18' 15" 20º 14' 45"	21.71	3.66	331	MH09LH0932	Ungated	10/05/2021 07/12/2021 28/02/2022	3.19,3.20,3.34	03
73	Kupta	2013	77º 35' 23" 20º 18' 19"	17.89	3.638	290.74	MH09LH2190	Ungated	14/05/2021 04/12/2021	Nill	00
74	Gondegaon	2014	76º 36' 21" 20º 04' 22"	19.95	5.12	403.68	MH09LH2191	Ungated	14/05/2021 07/12/2021	3.2,3.9	02

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
75	Jogaldari	2011	77º 24' 25" 20º 15' 36"	17.23	3.07	485	MH09MH2146	Ungated	08/05/2021 08/12/2021	3.1,3.9,3.19,3.20	04
76	Kasola	2013	70º 16' 15" 20º 14' 30"	17.90	1.605	230	MH09LH2189	Ungated	10/05/2021 08/12/2021 28/02/2022	Nill	00
77	Wadgaon	2016	---	17.40	5.155	676.348	---	Ungated	19/05/2021 04/12/2021 28/02/2022	Nill	00
78	Kinkhed	2020	77º 30' 15" 20º 24' 30"	17.74	2.328	248	--	Ungated	09/05/2021 04/12/2021 28/02/2022	Nil	00
79	Hiwara(Kh)	2011	77º 23' 15" 20º 09' 17"	15.70	2.38	261.30	MH09MH2147	Ungated	10/05/2021 07/12/2021	3.9	01
80	Parwa-Kohar	---	---	16.50	4.42	341	---	Ungated	20/05/2021 04/12/2021	Nill	00
81	Ingalwadi	2019	---	22.30	1.6977	210.940	---	Ungated	10/05/2021 07/12/2021	3.19	01
III) Superintending Engineer .Amravati Irrigation Project Circle, Amravati . **1) Executive Engineer, Amravati Project Construction Division. Amravati.**											
82	Nagthana-2	2010	78º 40' 30" 20º 16' 30"	22.60	4.27	836.04	MH09MH2153	Ungated	18/10/2021	Nil	00
83	Bahada	2014	78º 11' 30" 21º 29' 45"	16.73	2.61	164.39	MH09LH2196	Ungated		NIL	00
84	Zatamzari	2014	77º 59' 30" 21º 06' 30"	18.30	2.84	83.19	MH09LH2193	Ungated	18/10/2021	NIL	00
85	Bhimadi	2018	72º 02' 00" 29º 12' 00"	20.28	3.59	155.67	MH09MH2233	Ungated	18/10/2021	NIL	00
2) Executive Engineer , Irrigation Project & Water Resource Investigation Department, Amravati.											
86	Chandi	2012	77º 45' 00" 20º 45' 16"	14.10	14.81	1295.00	MH09LH2192	Ungated	21/05/2021 18/11/2021	3.1,3.5	02
87	Bordi nalla	2015	77º 59' 09" 21º 24' 00"	18	5.91	594.80	MH09LH2216	Ungated	15/05/2021 28/11/2021	3.13	01

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
B) Chief Engineer W.R , Amravati **I) Superintending Engineer ., Buldana Irrigation Project Circle, Buldana** **1) Executive Engineer Minor Irrigation Division. Buldana**											
88	Botha	1997	76º 35' 00" 20º 35' 20"	18.08	2.00	175	MH09MH1426	Ungated	15/05/2021	3.2,3.7,3.9,3.13,3.16,3.20,3.33	07
89	Lower Dnyangang	2019	76º 27' 00" 20º 39' 00"	21.24	10.82	2111.45	----	Ungated	15/05/2021	Nil	00
II) Superintending Engineer, Yavatmal Irrigation Circle (M), Yavatmal. **1) Executive Engineer Yavatmal Irrigation Division, Yavatmal**											
90	Nignoor	1969	78º 50' 00" 19º 40' 00"	18.46	3.63	443	MH09MH0187	Ungated	04/05/2021 21/11/2021	3.1,3.9,3.16,3.19,3.20,3.22,3.34	07
91	Deogaon	1986	78º 54' 00" 20º 10' 00"	15.91	7.31	764	MH09MH1131	Ungated	28/05/2021 31/12/2021	3.1,3.9,3.16,	03
92	Anji	1984	78º 34' 00" 20º 10' 00"	20.32	2.80	210	MH09MH1117	Ungated	27/05/2021 07/01/2022 11/01/2022	3.1,3.5,3.7,3.9,3.16	05
93	Singandoh	1993	78º 58' 00" 20º 24' 06"	17.00	3.13	686	MH09MH1310	Ungated	25/05/2021 10/01/2022 10/01/2022	3.7,3.9,3.16,3.19,3.20,3.35	06
94	Marsul	1981	77º 39' 00" 19º 39'00"	19.84	2.37	199	MH09MH0862	Ungated	04/05/2021 21/11/2021	3.5,3.9,3.16,3.19,3.20,3.22,3.34	07
95	Waghadi	1978	78º 18' 10" 20º 15' 30"	26.00	41.11	1815	MH09MH0739	Ungated	23/05/2021 27/12/2021	3.5,3.9,3.19,3.20,3.21	05
96	Vihirgaon	1992	78º 30' 00" 20º38' 00"	15.54	3.17	226	MH09MH1289	Ungated	11/05/2021 11/01/2022 11/01/2022	3.5,3.7,3.9,3.16,3.19,3.20	06
97	Antargaon	1986	78º 26' 00" 20º 15' 00"	17.42	7.20	517	MH09MH1123	Ungated	15/05/2021 23/11/2021	3.5,3.7,3.9,3.16,3.20	05
98	Borgaon	1993	78º 17' 43" 20º 20' 16"	20.00	14.04	686	MH09MH1311	Ungated	13/05/2021 27/12/2021	3.5,3.7,3.9,3.19,3.22,3.34	06
99	Darati	1985	78º 07' 00" 19º 37' 00"	16.40	2.74	249	MH09MH1080	Ungated	04/05/2021 21/11/2021	3.9,3.16,3.19,3.22,3.34	05

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
100	Dattapur	1991	78º 38' 00" 20º 26' 00"	15.18	1.68	154	MH09MH1267	Ungated	11/05/2021 11/01/2022 11/01/2022	3.1,3.5,3.9,3.16,3.20,3.22	06
101	Dudhana	1977	78º 20' 30" 20º 12' 30"	15.00	1.04	148	MH09MH0606	Ungated	23/05/2021 27/12/2021	3.1,3.5,3.7,3.9,3.16,3.20	05
102	Durug	1967	78º 21' 00" 20º 23' 30"	15.55	3.59	354	MH09MH0143	Ungated	13/05/2021 11/01/2022 11/01/2022	3.1,3.5,3.7,3.9,3.16,3.19,3.20,3.22.	08
103	Ghoti	1986	77º 54' 00" 20º 10' 00"	15.91	7.31	764	MH09MH0417	Ungated	13/05/2021 23/11/2021	3.1,3.5,3.6,3.7,3.9,3.16,3.19,	07
104	Goki	1981	77º 54' 00" 20º 17' 00"	23.06	50.22	2066	MH09MH0904	Ungated	13/05/2021 01/03/2022	3.1,3.9,3.7,3.16,3.20,3.25	06
105	Karanji	1985	78º 08' 00" 20º 30' 00"	18.18	2.15	183	MH09MH0348	Ungated	15/05/2021 28/12/2021	3.1,3.5,3.19,3.20,3.22	05
106	Kapra	1981	78º 7' 00" 20º 08' 00"	20.36	2.80	209.5	MH09MH0904	Ungated	13/05/2021 01/10/2021 10/01/2022	3.1,3.7,3.9,3.19,3.20,3.22	05
107	Khadakdoh	1976	78º 46' 00" 19º 54' 00"	17.32	2.64	313	MH09MH0624	Ungated	10/05/2021 31/12/2021	3.1,3.5,3.9,3.19,3.20,3.21,3.22, 3.35	08
108	Khandani	2002	78º 18' 23" 21º 33' 31"	18.00	6.62	569	MH09MH0873	Ungated	15/05/2021 28/12/2021	3.1,3.5,3.9,3.19,3.20,3.22,3.23, 3.33	08
109	Muchi	1977	78º 35' 00" 20º 03' 30"	15.55	1.41	183	MH09MH0610	Ungated	15/05/2021 28/12/2021	3.5,3.7,3.9,3.19,3.20,3.21,3.22	07
110	Munjala	1969	77º 33' 00" 20º 03' 00"	16.00	2.10	230	MH09MH0180	Ungated	11/05/2021 28/12/2021	3.5,3.9,3.20,3.21	04
111	Pendhari	1991	78º 23' 00" 21º 32' 00"	16.00	1.37	119	MH09MH1274	Ungated	10/05/2021 31/12/2021	3.5,3.9,3.19,3.20,3.21,3.22	06
112	Pimpalkhuti	1977	78º 30' 40" 20º 11' 20"	15.70	2.38	292	MH09MH0421	Ungated	27/05/2021 01/11/2021	3.1,3.7,3.9,3.16,3.19,3.21,3.33	06
113	Rajur	1977	78º 24' 00" 20º 40' 00"	17.02	2.295	196	MH09MH1236	Ungated	27/05/2021 01/07/2021	3.4,3.5,3.7,3.9,3.16,3.21	06
114	Rampur	1977	78º 45' 00" 21º 12' 20"	16.05	1.37	119	MH09MH0672	Ungated	10/05/2021 28/12/2021	3.5,3.7,3.9,3.16,3.20,3.22,3.34	06

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
115	Rui	1967	77º 04' 00" 20º 02' 06"	16.15	3.55	111	MH09MH0137	Ungated	28/05/2021 01/03/2021	3.1,3.7,3.9	03
116	Saikheda	1972	78º 30' 40" 20º 05' 00"	23.77	38.51	2671	MH09MH0315	Ungated	23/05/2021 28/12/2021	3.1,3.9,3.16,3.19,3.20	05
117	Takali	1995	78º 07' 00" 20º 24' 06"	17.00	5.39	554	MH09MH1236	Ungated	13/05/2021 01/10/2021	3.1,3.16,3.19,3.20,3.21,3.34, 3.35	07
118	Zola	1985	78º 08' 10" 20º 30' 00"	18.18	2.15	183	MH09MH1076	Ungated	27/05/2021 01/10/2021	3.1,3.5,3.7,3.9,3.16,3.19,3.22	07
2) Executive Engineer Arunavati Pro. Dn. Digras Dist, Yavatmal											
119	Nawargaon	1997	78º46' 30" 20º04' 30"	19.35	14.98	1403	MH09MH1451	Ungated	22/05/2021	3.5,3.7,3.9,3.20,3.22	06
120	Satpalli	2000	78º 31' 50" 29º 19' 25"	16.05	2.86	186	MH09MH2150	Ungated	22/05/2021	3.1,3.5,3.7,3.9,3.34	05
121	Khemkund	2001	78º 27'45" 20º 11' 06"	17.13	3.70	266	MH09MH1578	Ungated	24/05/2021	3.1,3.5,3.7,3.9,3.20,3.26,3.35	07
122	Manjara	1994	78º 22'13" 20º 05' 55"	16.80	3.68	454	MH09MH1585	Ungated	24/05/2021	3.5,3.7,3.9,3.20	04
123	Wardh	1998	78º 74' 05" 20º 14' 06"	19.42	8.67	411	MH09MH1598	Ungated	24/05/2021	3.1,3.9,3.20,3.26	04
124	Warud	1997	78º 31'50" 20º 19' 25"	18.32	8.94	576	MH09MH1439	Ungated	24/05/2021	3.1,3.5,3.20	03
125	Wai	1997	78º 37'30" 20º 05' 00"	18.02	9.31	553	MH09MH0362	Ungated	12/05/2021	3.1,3.9,3.20,3.26	04
126	Sirasgaon	1998	77º 44' 00" 20º 30' 00"	21.12	9.13	860	MH09MH1676	Ungated	28/04/2021	3.1,3.6,3.9,3.18,3.20,3.35	07
127	Ner	1995	78º 30'34" 20º 30' 32"	15.10	6.79	1039	MH09MH0676	Ungated	28/04/2021	3.1,3.6,3.9,3.18,3.20,3.35	06
128	Mulgavan	1994	78º 37' 30" 19º 57' 30"	16.44	2.42	203.66	MH09MH2152	Ungated	22/05/2021	3.1,3.6,3.9,3.16,3.19,3.20,3.23	06

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
II) Superintending Engineer, Yavatmal Irrigation Project Circle, Yavatmal. **1) Executive Engineer . Yavatmal Project Construction Division, Yavatmal.**											
129	Kohal	2016	70º 59' 04" 20º 33' 17"	20.59	12.28	933	--	Ungated	06/05/2021 07/11/2021 10/01/2022	3.9,3.22,3.33	03
130	Pachpahur	2016	78º 42' 00" 19º 59' 00"	21.35	7.98	711.00	MH09MH1715	Ungated	21/05/2021 23/11/2021	NIl	00
131	Dahegaon	2016	78º 42' 05" 20º 11' 31"	17.35	3.39	406.41	--	Ungated	21/05/2021 23/11/2021	3.20,3.22	02
132	Kumbharpind	2004	77º56' 00" 20º 30' 20"	16.30	4.77	554	--	Ungated	15/04/2021 17/11/2021 10/01/2022	3.1,3.5,3.9,3.19,3.20,3.22	06
133	Manpur	2018		19.13			---	Ungated	06/05/2021 23/11/2021	3.5,3.9,3.20,3.22	04
134	Kochi	2019		18.90			---	Ungated	21/05/2021 29/10/2021	3.5,3.7,3.9,3.22	04
2) Executive Engineer, Minor Irrigation Division, Pusad.											
135	Kali (D)	2007	77º 42' 52" 19º 56' 19"	15.32	4.50	489.11	MH09MH2151	Ungated	18/11/2021	3.1,3.5,3.9,.3.20	04
136	Amadapur	2005	77º 55' 49" 20º 40'48"	17.40	14.83	796	MH09MH2155	Ungated	13/05/2021 18/11/2021	3.5,3.7,3.9,3.20,3.23,3.28	06
137	Pimpalgaon	1997	77º 47' 03" 19º 42' 03"	21.84	8.96	528	MH09MH1449	Ungated	13/05/2021 18/11/2021	3.5,3.7,3.9,3.22,3.23,3.28	06
138	Jamb nalla	1999	79º 39' 44" 19º 45' 15"	24.20	9.69	795	MH09MH1523	Ungated	10/05/2021 21/11/2021	3.5,3.9,3.20,3.22,3.35	05
139	Kumbharkinhi	2002	77º 40' 48" 20º 18' 05"	18.10	11.59	991	MH09MH1613	Ungated	10/05/2021 21/11/2021	3.5,3.7,3.9,3.16,3.20,3.22,3.23,3.34	07
II) Superintending Engineer, Upper Wardha Irrigation Circle, Amravati. **1) Executive Engineer . Minor & Medium Project Division, Achalpur.**											
140	Baslapur	1972	**77º 50' 00"** **20º 50' 00"**	17.85	1.53	193	MH09MH0275	Ungated	21/05/2021 04/12/2021	3.2,3.5,3.7,3.6,3.9,3.20,3.22, 3.34	07
141	Mandwa (amt)	1973	**76º 47' 00"** **21º 45' 00"**	17.52	1.37	154	MH09MH0573	Ungated	25/05/2021 02/12/2021	3.5,3.7,3.16,3.20,3.21	05

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
142	Bhiwapur	1979	77º 43' 00" 20º 33' 00"	17.90	4.04	785	MH09MH0801	Ungated	21/05/2021 01/12/2021	3.2,3.5,3.6,3.7,3.9,3.16,3.20, 3.34	08
143	Gawalandoh	1973	76º 47' 00" 21º 45' 00"	17.52	1.37	154	MH09MH0400	Ungated	25/05/2021 12/02/2021	3.5,3.7,3.9,3.19,3.20,3.21	05
144	Khari	1979	76º 50' 30" 21º 27' 30"	19.45	2.55	98.39	MH09MH0156	Ungated	25/05/2021 02/12/2021	3.5,3.7,3.9,3.16,3.19,3.20,3.21,	07
145	Malkhed	1972	77º 55' 00" 20º 50' 00"	17.05	10.90	1108	MH09MH0309	Ungated	21/05/2021 12/04/2022	3.4,3.5,3.9,3.20,3.22,3.34,3.35	07
146	Nanduri	2005	77º 10' 00" 21º 28' 30"	17.11	2.35	214	MH09MH2158	Ungated	25/05/2021 02/12/2021	3.5,3.16	02
147	Sadrabadi	1973	76º 47' 00" 21º 47' 00"	17.52	1.37	154	MH09MH0336	Ungated	28/05/2021 02/12/2021	3.5,3.7,3.19,3.20,3.21	04
148	Sakhali	1980	77º 43' 00" 20º 33' 30"	18.60	7.26	953	MH09MH0839	Ungated	20/05/2021 12/11/2021	3.5,3.9,3.16,3.19,3.20,3.34	06
149	Salai	1982	76º 51' 00" 21º 27' 00"	16.17	1.45	87	MH09MH0913	Ungated	28/05/2021 02/12/2021	3.5	01
150	Sawalikheda	1973	76º 42' 00" 21º 21' 00"	16.90	1.24	71.54	MH09MH0542	Ungated	28/05/2021 02/12/2021	3.5,3.7,3.16,3.19,3.21,3.34	06
151	Shekdari	1983	78º 12' 00" 20º 31' 00"	35.35	5.20	591	MH09MH0939	Ungated	09/05/2021 12/05/2021	3.5,3.7,3.16,3.19,3.22,3.34	06
152	Loni Dhawalgiri	2007	78º 11' 40" 21º 24' 30"	15.90	7.93	1043	MH09MH2157	Ungated	23/05/2021 12/05/2021	3.19,3.22	02
153	Hirabambai	2011	76º 48' 10" 21º 20' 50"	22.20	3.73	188	MH09MH2159	Ungated	15/05/2021 02/12/2021	3.9,3.19,3.20,3.22,3.33,3.34	06
2) Executive Engineer . Amravati Medium Project Division, Amaravati											
154	Kawaranalla	2007	76º 55' 00" 21º 26' 00"	22.25	11.83	919	MH09MH2156	Ungated	22/03/2020 28/11/2020	3.9,3.20	02
155	Karajgaon	2019	77º38' 00" 21º10' 00"	18.10	14.362	1157	MH09MH2166	Ungated	08/06/2020 27/11/2020	3.5,3.22	02

Sr. No	Name of Dam	Year of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
3) Executive Engineer . Amravati Irrigation Division, Amaravati											
156	Bor River	2020	77º 47' 00" 21º 1' 08"	15.81	7.782	1007.78	MH09MH2170	Ungated	20/12/2021	3.5,3.9	02
157	Chandus Wathod	2018	78º 20' 30" 21º 27' 15"	22.56	12.3696	-----	MH09MH2167	Ungated	19/05/2021	3.9,3.20	02
158	Songaon Shivani LMI	2015	77º 58' 34" 20º 46' 06"	15.60	8.516	-----	MH09MH2172	Ungated	-----	3.9,3.20	02
3) Executive Engineer . Amravati Irrigation Division, Amaravati											
156	Bor River	2020	77º 47' 00" 21º 1' 08"	15.81	7.782	1007.78	MH09MH2170	Ungated	20/12/2021	3.5,3.9	02
157	Chandus Wathod	2018	78º 20' 30" 21º 27' 15"	22.56	12.3696	-----	MH09MH2167	Ungated	19/05/2021	3.9,3.20	02
158	Songaon Shivani LMI	2015	77º 58' 34" 20º 46' 06"	15.60	8.516	-----	MH09MH2172	Ungated	-----	3.9,3.20	02

Table 3.16

Private Class-I Dams with Category-1 Deficiency

Sr. No.	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Significant Deficiencies noticed	Remedial Measures Suggested
1	2	3	4	5	6	7
---------- NIL ----------						

Table 3.17

Private Class-I Dams with Category-2 Deficiency

Sr. No.	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Significant Deficiencies noticed	Remedial Measures Suggested
1	2	3	4	5	6	7
---------- NIL ----------						

Table 3.18

Private Class-I Dams with Category-3 Deficiency

Sr. No	Name of Dam	Date of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
MAHA GENCO PARAS TPS, AKOLA											
1	Paras							Gated	04/12/2021	3.6,3.18,3.20,3.21,3.24, 3.25,3.26,3.27	08
2	Lower Mun							Gated	04/12/2021	3.6,3.18,3.20,3.21,3.24, 3.25,3.26,3.27	08

Table 3.19

Private Class-II Dams with Category-1 Deficiency

Sr. No.	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Significant Deficiencies noticed	Remedial Measures Suggested
1	2	3	4	5	6	7
---------- NIL ----------						

Table 3.20

Private Class-II Dams with Category-2 Deficiency

SR NO	DAM FEATURES	DATE OF INSPECTION	INSPECTING OFFICER	MAIN COMPONENT OF DAM	SIGNIFICANT DEFICIENCIES NOTICED.	REMEDIAL MEASURES SUGGESTED
1	Name:- **Nilona** Year of completion :- **1972** Location : - Longitude :- **78° 08' 00"** Latitude :- **20° 23' 00"** Height :- **17.38m.** Gross capacity :- **6.89 Mm³** Design Spillway capacity :- **880** Sr. No. In National register oflarge Dams 2009) :- **MH09MH0307**	26/06/2020 06/11/2020	Shri N.K.Tayade E.E.D.S.D.2 Nashik Shri S.B.Khairnar SDE .D.S.D.2 Nashik	Earth dam Earth dam Earth dam	1) Heavy vegetation on U/S & D/S slope of dam (B13) 2) Section of earthen dam at many spots is under section & also undulation observed on top of dam (B1) 3)The pitching on U/S of dam is distrubeted at some places. (B3)	Time bound program to remove the vegetation should be carried out. Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is under section or not. Then restored for designed profile. Pitching to be reset by using stones of adequate weight and size laid over properly graded filter.
2	Name:- **Chapdoh** Year of completion :- **2004** Location : - Longitude :- **78° 13' 00"** Latitude :- **20° 15' 38"** Height :- **25.20m.** Gross capacity :- **13.20 Mm³** Design Spillway capacity :- **1310** Sr. No. In National register oflarge Dams 2009) :- **MH09MH2160**	26/06/2020 06/11/2020	Shri N.K.Tayade E.E.D.S.D.2 Nashik Shri S.B.Khairnar SDE .D.S.D.2 Nashik		1) Approach road to dam site is heavily damaged (B6) 2) Heavy vegetation on U/S & D/S slope of dam (B13) 3)Settlement of earth work on U/S & D/S slopes of dam on left flank for approximate length 90m. 4)The pitching on U/S of dam is distrubeted at some places. (B3)	Necessary repairs to road should be done immediately Time bound program to remove the vegetation should be carried out. Superimpose existing cross sections on designed c/s at every 15m interval to ascertain whether earthen embankment is settled or not. Then restored for designed profile. Pitching to be reset by using stones of adequate weight and size laid over properly graded filter.

Table 3.21

Private Class-II Dams with Category-3 Deficiency

Sr. No	Name of Dam	Date of Compl-etion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register of Large Dams 2009	Gated / Ungated	Date of Inspection	Deficiencies noticed	Total Deficiencies
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	12
SUPERINTENDING ENGINEER, MAHARASHTRA JEEVAN PRADHIKARAN CIRCLE, AMRAVATI EXECUTIVE ENGINEER, M.J.P.WORKS, Dn.No.1,Yavatmal											
1	Nilona	1972	78° 08' 00" 20° 23' 00"	17.38	6.89	880	MH09MH0307	Ungated	11/01/2022	3.1,3.2,3.6,3.9,3.24,3.27, 3.28,3.30	08
2	Chapdoh	2004	78° 13' 00" 20° 15' 38"	25.20	13.20	1310	MH09MH2160	Ungated	11/01/2022	3.1,3.2,3.6,3.9,3.10,3.24, 3.27,3.28,3.30	09

Table 3.22

Category-1 Deficiency in Class-I Dams

Sr. No	Deficiency	Names of dams	Total No. of dams
1	2	3	4
---------- NIL ----------			

Table 3.23

Category-2 Deficiency in Class-I Dams

Sr. No	Deficiency	Names of dams	Total No. of dams
1	**A 2**: Standing pool / Ponding / Water Logging / Slushy condition on D/S of Dam	Dagadparwa	01
2	**A 4** : Major leakages through outlet conduit/pipe joints/Gates.	Arunavati, Chandrabhaga	02
3	**A 5** ; Relief wells not functioning properly./ Abnormal rise in water level in wells.	Katepurna, Lower Pus, Arunavati	03
4	**A 7 :** Retrogression /scouring in tail channel.	Mun	01
5	**A 8 :** Drainage gallery inaccessible/No adequate lighting./ No dewatering arrangement or failure.	Purna	01
6	**A 9 :** Foundation drains / holes/ porous pipes/chocked/ no seepage through foundation drain holes.	Pentakali, Katepurna	02
7	**A 14** : EDA / Stilling basin damaged/Hydraulic performance not good.	Lower Pus	01
8	**A 15** : Leakages through spillway /piers//junction of flank wall.	Lower Pus	01
10	**A16** : Damages / foundation erosion/ scour/undermining observed in vicinity of flank walls/ guide walls/ junction walls/return walls.	Lower Pus, Mun	02
11	**A 17** :End weir not in good condition / scouring noticed on immediate D/S.	Gnyanganga, Katepurna, Mun	03
12	**B 3** : Considerable settlement of embankment / Rock toe/ concavity of slopes.	Purna	01
13	**B 5 :** Outlet gates not functioning properly. Stem rod is bent(Service gate/Emergency gate/Stop log gate/sluice gate)	Arunavati, Gnyanganga, Chandrabhaga	03
14	**B 6:** Approach to dam through all weather road not constructed/ maintained properly.	Gnyanganga	01
15	**B 10:**Leakage through river sluice.	Pentakali	01
16	**B 12**: Damage to Rubber seals/ considerable Leakages through gates.	Katepurna, Lower Pus, Purna.	03
17	**B 13** : Heavy vegetation/big trees on embankment top/slope making dam portion not accessible.	Gnyanganga	01

Table 3.24

Category-1 Deficiency in Class-II Dams

Sr. No	Deficiency	Names of dams	Total No. of dams
1	2	3	4
---------- NIL ----------			

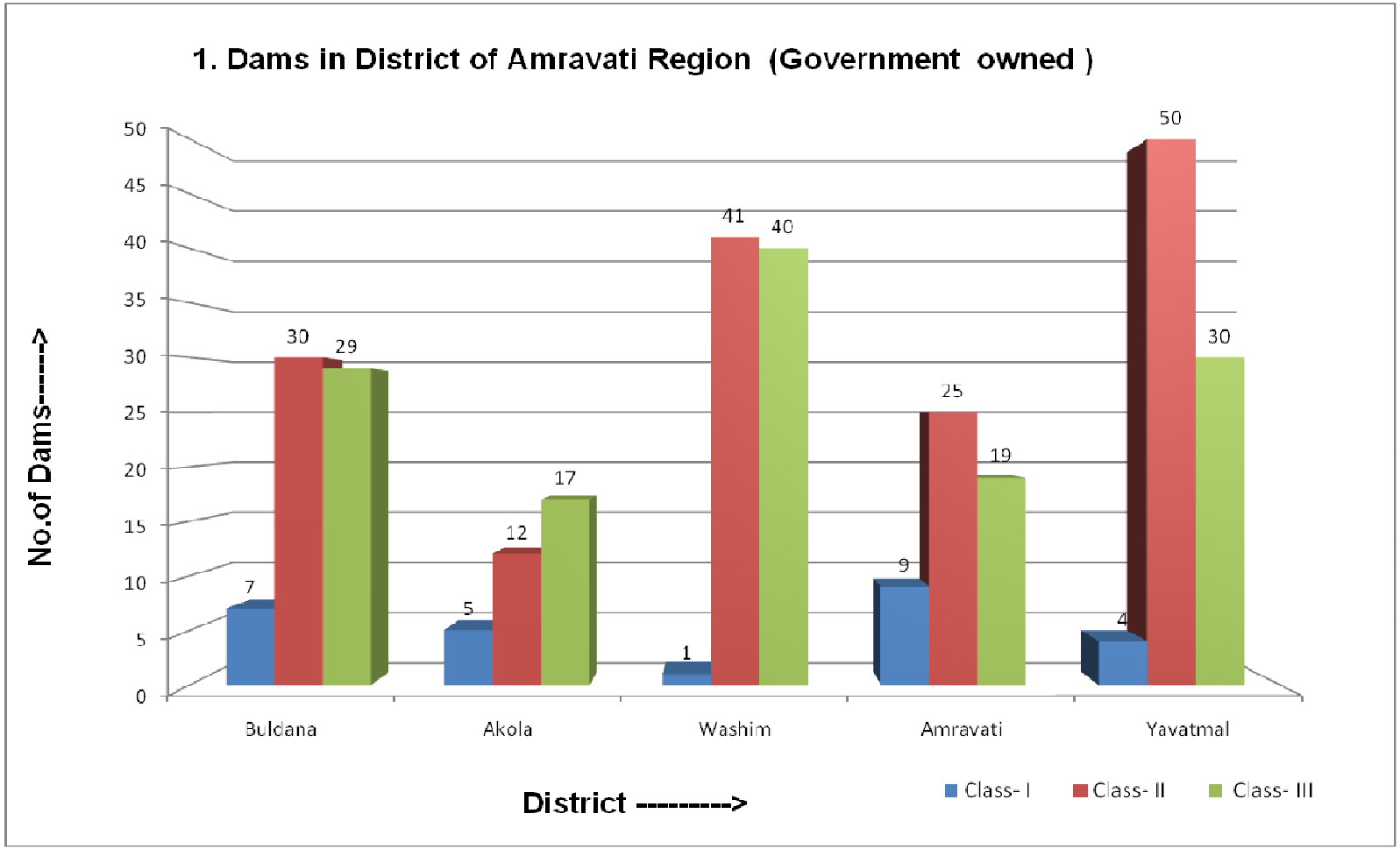
Table 3.25

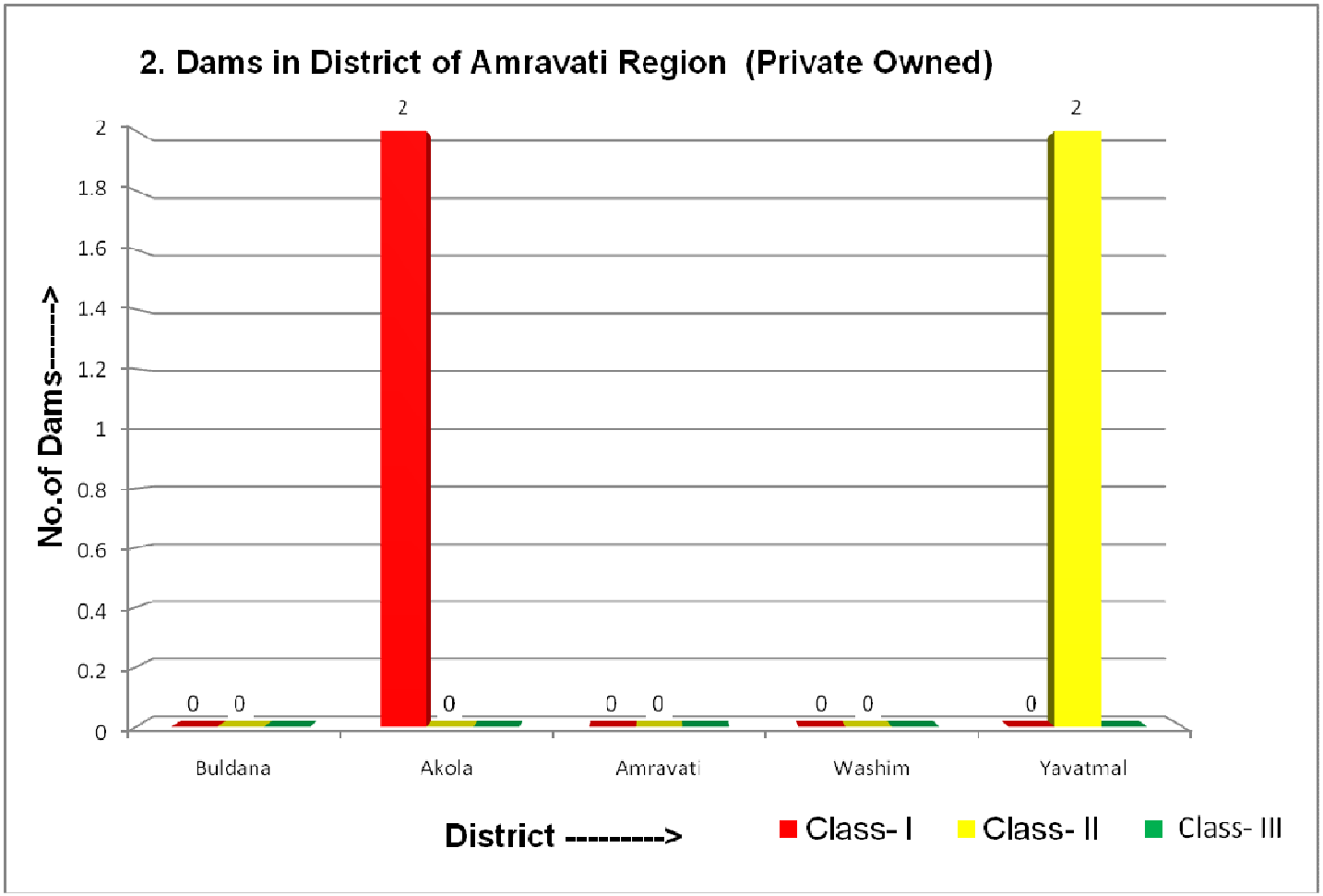
Category-2 Deficiency in Class-II Dams

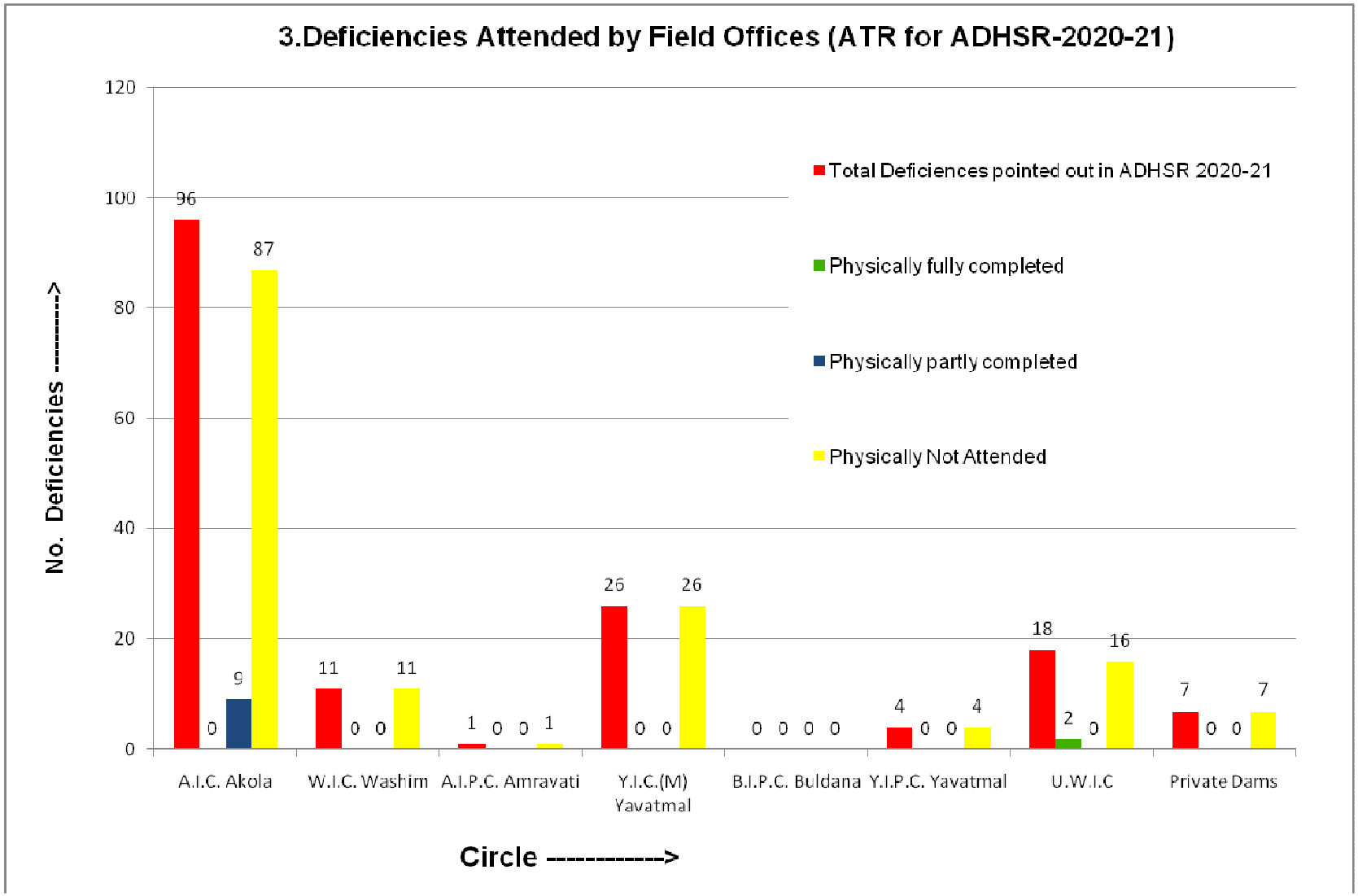
Sr. No	Deficiency	Names of dams	Total no of dams
1	2	3	4
1	**A.1**: Boil leakage/ seepage/ wet patches/ slushiness,in Earthen Dam.	Godada, Kardi, Tuljapur, Shahapur LMI, Shahapur, Nignoor, Vihirgaon, Kali(D), Songaon shivani, Chandus wathod.	10
2	**A 2**: Standing pool / Ponding / Water Logging / Slushy condition on D/S of Dam	Godada, Rajura, Shahapur LMI, Dudhana, Pendhari, Lowewr Dnyanganga.	06
3	**A 3** : Leakages in vicinity of junction between earthen dam & masonry dam portion.	Kardi, Uma	02
4	**A4:** Major leakages through outlet conduit/pipe joints/Gates.	Torna, Masrul, Pimpalgaon Chambhare, Pendhari, Vihirgaon, Mandwa(AMT)	06
5	**A 6** : Outlet well is damaged/not in good condition /cracks observed/jets of water in well.	Mandwa(Bld), Mas, Masrul, Bordinall , Durug, Kapra, Dahegaon, amadapur, Baslapur.	09
6	**A 7 :** Retrogression /scouring in tail channel.	Rajur, Mas, Paldhag, Pimpalner, Utawali, Ghota, Uma, Anjio, Vihirgaon, Satapalli, Bhivapur, Mandwa(Amt)	12
7	**A 14** : EDA / Stilling basin damaged/Hydraulic performance not good.	Mandwa(Bld), Mas, Kardi, Pimpalgaon Chambhare, singandoh.	05
8	**A 16** : Damages / foundation erosion/ scour/undermining observed in vicinity of flank walls/ guide walls/ junction walls/return walls	Rajur, Mas, Ghota, Anji, Deogaon.	05

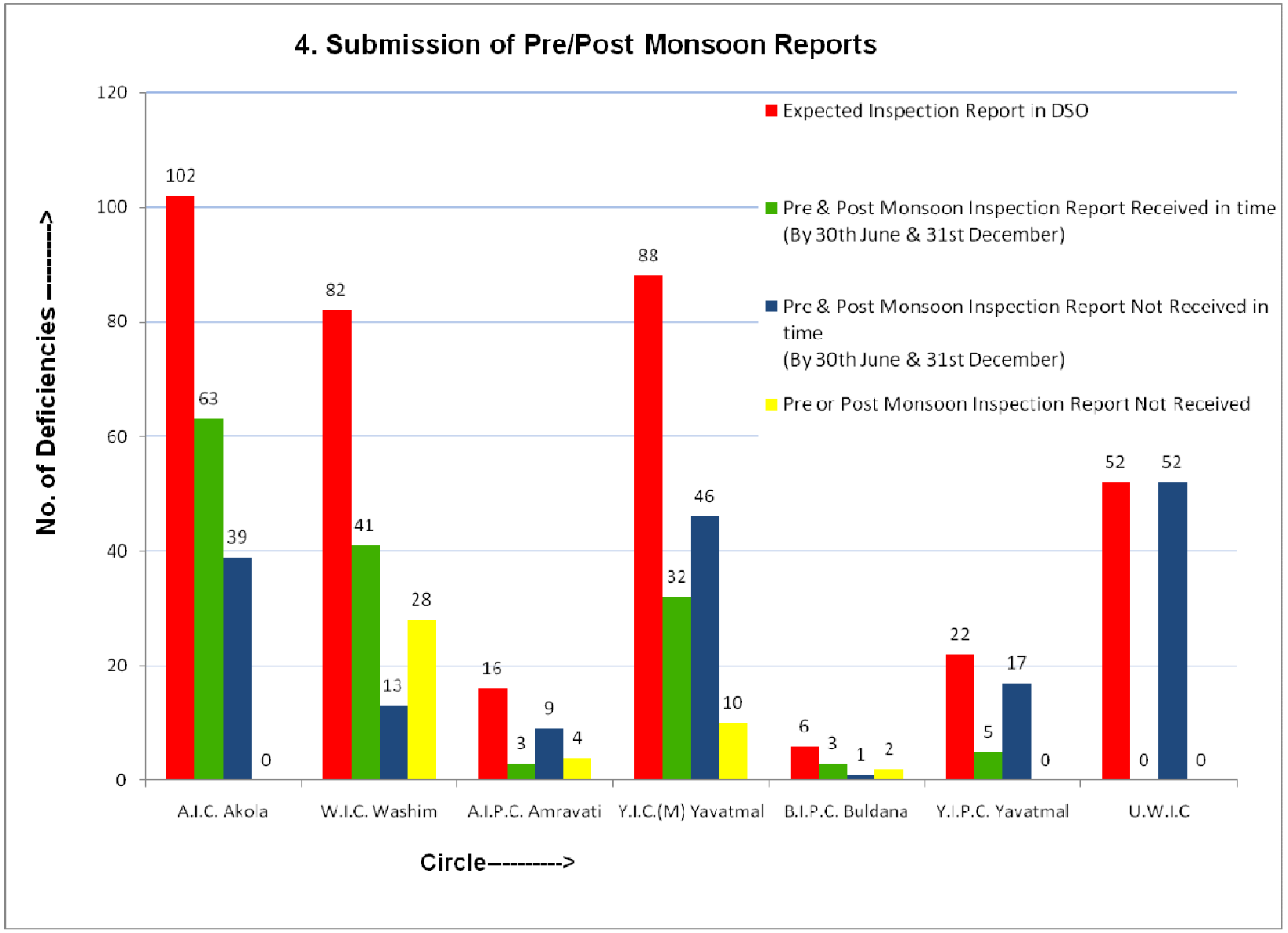
Sr. No	Deficiency	Names of dams	Total no of dams
1	2	3	4
9	**A 17** :End weir not in good condition / scouring noticed on immediate D/S.	.Godada, Paldhag, Pimpalner, Ghota, Uma, Singandoh, Satapalli, Mandwa(Amt)	08
10	**B 1** Dam section is not as per design	Mandwa(Bld), Mas, Paldhag, Pimpalner, Utawali.	05
11	**B3** : Considerable settlement of embankment / Rock toe/Pitching/ U/S & D/S slops, bulging/concavity of slopes.	Mandwa(BLD), Mas, Paldhag, Utawali, Vidrupa, Nirguna, Ghota, Tuljapur, Singandoh, Waghadi.	10
12	**B 5 :** Outlet gates not functioning properly. Stem rod is bent(Service gate/Emergency gate/Stop log gate/sluice gate)	Sakhali Nalla	01
13	**B 4**: Longitudinal / Transverse cracks/ low area/sink holes/gully formation on top side slope of earthen dam.	Mas	01
14	**B 5 :** Outlet gates not functioning properly. Stem rod is bent(Service gate/Emergency gate/Stop log gate/sluice gate)	Kapara, Vihirgaon, Mandwa(AMT)	03
15	**B 6** : Approach to dam through all weather road not constructed/maintained properly.	Nirguna	01
16	**B 7**: Waste weir/waste weir bar not in good condition/coping damaged/leakage through waste weir.	Mas, Kardi, Nirguna, Ghota, Tuljapur, Pimpalgaon Chambhare, Nignoor, Singandoh, amadapur, Bhivapur, Mandwa(Amt).	11

Sr. No	Deficiency	Names of dams	Total no of dams
1	2	3	4
17	**B 8** : Pointing on U/S face of dam not in good condition./deterioration spalling of concrete surface.	Mandwa(Amt), Pimpalner	02
18	**B 12** : Damage to Rubber seals/ considerable Leakages through gates.	Sakhali Nala	01


1. Dams in District of Amravati Region (Government owned)
No.of Dams------>
50
45
40
35
30
25
20
15
10
5
0
7
30
29
5
12
17
1
41
40
9
25
19
4
50
30
Buldana
Akola
Washim
Amravati
Yavatmal
District --------->
Class- I
Class- II
Class- III

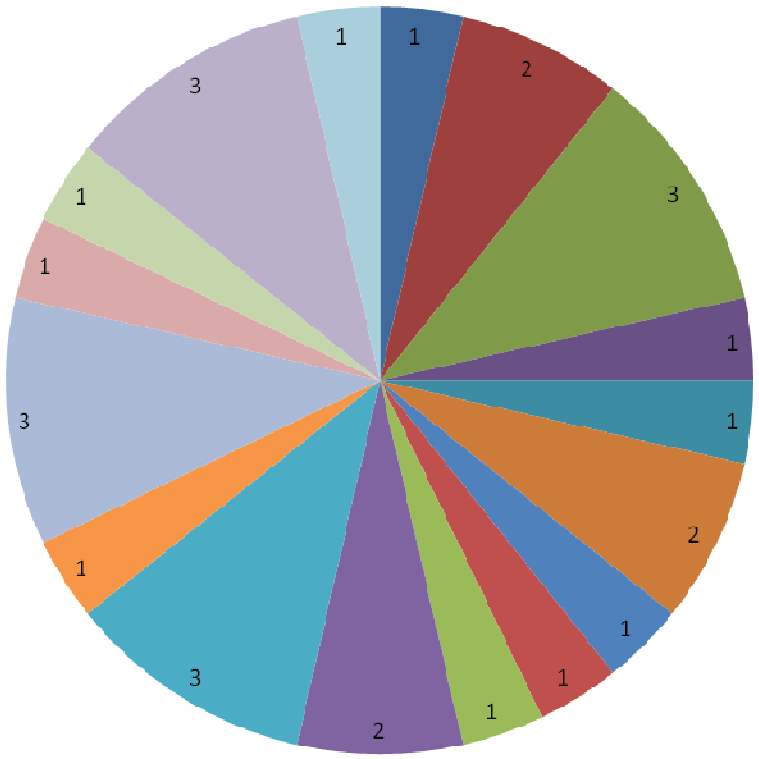

2. Dams in District of Amravati Region (Private Owned)
No.of Dams------>
2
1.8
1.6
1.4
1.2
1
0.8
0.6
0.4
0.2
0
0 0
2
0
0 0
0 0
0
2
Buldana
Akola
Amravati
Washim
Yavatmal
District --------->
Class- I
Class- II
Class- III


3.Deficiencies Attended by Field Offices (ATR for ADHSR-2020-21)
No. Deficiencies ---------->
120
100
80
60
40
20
0
Total Deficiences pointed out in ADHSR 2020-21
Physically fully completed
Physically partly completed
Physically Not Attended
96
0
9
87
11
0
0
11
1
0
0
1
26
0
0
26
0
0
0
0
4
0
0
4
18
2
0
16
7
0
0
7
A.I.C. Akola
W.I.C. Washim
A.I.P.C. Amravati
Y.I.C.(M) Yavatmal
B.I.P.C. Buldana
Y.I.P.C. Yavatmal
U.W.I.C
Private Dams
Circle ---------->
151
DSO-ADHSR_2021-22/ (Amravati)


4. Submission of Pre/Post Monsoon Reports
No. of Deficiencies ---------->
120
100
80
60
40
20
0
Expected Inspection Report in DSO
Pre & Post Monsoon Inspection Report Received in time (By 30th June & 31st December)
Pre & Post Monsoon Inspection Report Not Received in time (By 30th June & 31st December)
Pre or Post Monsoon Inspection Report Not Received
102
63
39
0
82
41
13
28
16
3
9
4
88
32
46
10
6
3
1
2
22
5
17
0
52
0
52
0
A.I.C. Akola
W.I.C. Washim
A.I.P.C. Amravati
Y.I.C.(M) Yavatmal
B.I.P.C. Buldana
Y.I.P.C. Yavatmal
U.W.I.C
Circle--------->

5.Category wise Deficiencies Class-I Dams

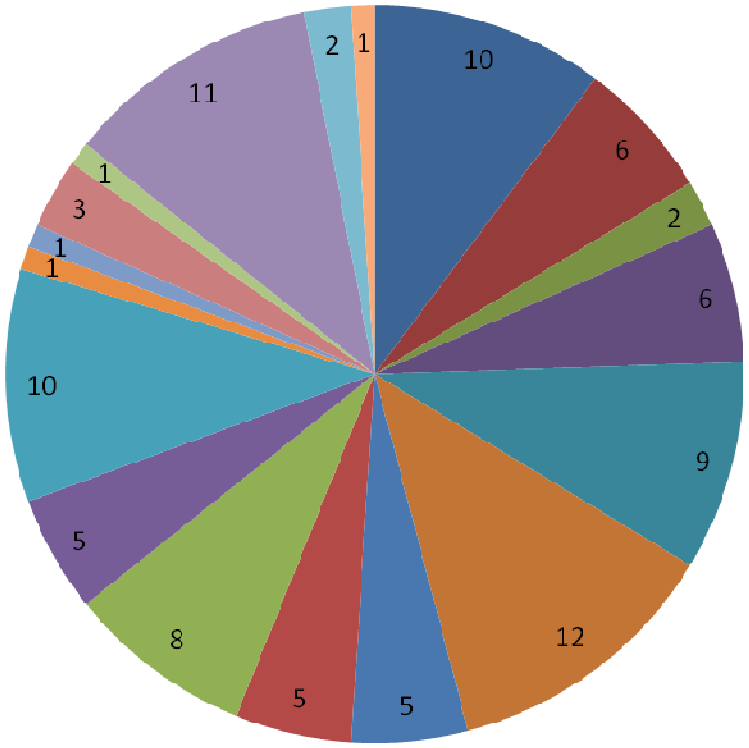
[Ref. Table-3.23]



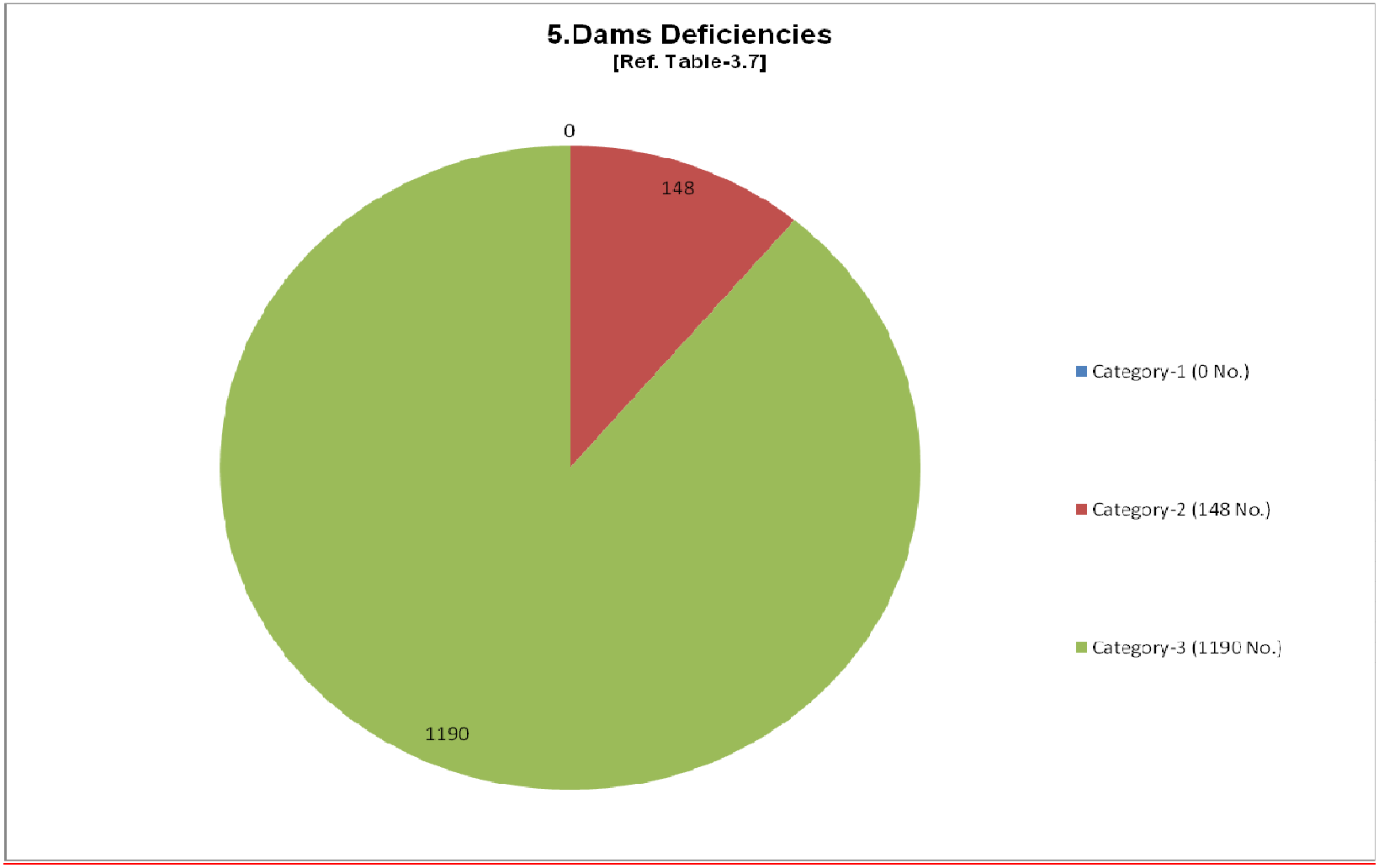
- A 2: Standing pool / Ponding / Water Logging / Slushy condition on D/S of Dam
- A 4 : Major leakages through outlet conduit/pipe joints/Gates.
- A 5; Relief wells not functioning properly./ Abnormal rise in water level in wells.
- A 7: Retrogression / scouring in tail channel
- A 8: Drainage gallery inaccessible/no adequate lighting./ No dewatering arrangement or failure.
- A 9: Foundation drains / holes/ porous pipes/ chocked/ no seepage through foundation drain holes.
- A 11 : EDA / Stilling basin damaged/Hydraulic performance not good.
- A 15 : Leakages through spillway/piers//junction of flank wall.
- A 18: Wire ropes of hoist not in good condition/hoisting structure damaged/cracked.(1 No)
- A 16 : Damages/foundation erosion/ scour/undermining observed in vicinity of flank walls/guide walls/ junction walls/return walls.
- A 17 : End weir not in good condition/ scouring noticed on immediate D/S.
- B 3 : Considerable settlement of embankment / Rock toe / concavity of slopes
- B 5 : Outlet gates not functioning properly Stem rod is bent(Service gate/Emergency gate/Stop log gate/sluice gate)
- B 6: Approach to dam through all weather road not constructed/ maintained properly.
- B 10: Leakage through river sluice.
- B 12: Damage to Rubber seals/ considerable Leakages through gates.
- B 13 : Heavy vegetation/big trees on embankment top/slope making dam portion not accessible.

6.Category wise Deficiencies of Class-II Dams

[Ref. Table-3.25]



- A.1: Boil leakage/ seepage/ wet patches/ slushiness,in Earthen Dam.
- A 2: Standingpool / Ponding / Water Logging / Slushy condition on D/S of Dam
- A 3 : Leakages in vicinity of junction between earthen dam & masonry dam portion
- A4: Major leakages through outlet conduit/pipe joints/Gates
- A 5 : Outlet well is damaged/not in good condition /cracks observed/ jets of water in well
- A 7 : Retrogression /scouring in tail channel.
- A 14 : EDA / Stilling basin damaged/Hydraulic performance not good.
- A 16 : Damages / foundation erosion/ scour/undermining observed in vicinity of flank walls/ guide walls/ junction walls/return walls
- A 17 :End weir not in good condition / scouring noticed on immediate D/S.
- B 1 Dam section is not as per design. (10 No)
- B3 : Considerable settlement of embankment / Rock toe/Pitching/ U/S & D/S slops. (15 No) bulging/concavity of slopes.
- B 5 : Outlet gates not functioning properly. Stem rod is bent (Service gate/Emergency (3 No) gate/Stop log gate/sluice gate)
- B 4: Longitudinal / Transverse cracks/ low area/sink holes/gully formation on top side slope of earthen dam. (2No)
- B 5 : Outlet gates not functioning properly. Stem rod is bent (Service gate/Emergency gate/Stop log gate/sluice gate). (4 No)
- B 6 : Approach to dam through all weather road not constructed/maintained properly. (1 No)
- B 7: Waste weir/waste weir bar not in good condition/coping damaged/leakage through waste weir.
- B 8 : Pointing on U/S face of dam not in good condition./deterioration spalling of concrete surface.
- B 12 : Damage to Rubber seals/ considerable Leakages through gates.


5.Dams Deficiencies
[Ref. Table-3.7]
0
148
1190
Category-1 (0 No.)
Category-2 (148 No.)
Category-3 (1190 No.)

Annexure-2

Snapshots of Dams inspected by DSO

Snapshots -1
Kapra (Class-II)
Taluka – Ralegaon Dist – Yavatmal
Date of Inspection – 10/01/2022
L/S Wall of Outlet well collapsed at foundation level .(A6)

Snapshots -2
Lower Pus (Class-I)
Taluka – Buldana Dist – Buldana
Date of Inspection –12/01/2022
Heavy leakages were observed through pier no-8 (left side of gate no-8) just above crest level.

Part-4

Annual Performance Report of Dam Instruments

Part-4 : Annual Performance Report of Dam Instruments

4.1 General :

The main purpose of instrumentation in dam is to warn of any changes that could in danger the safety of a dam, as well as to provide a confirmatory check in design assumptions and methods of computation.

Instruments embedded in or installed at the surface of the dam keeps a constant watch over the performance and indicate the distress spots for which remedial measures may be taken. Thus, instruments play an important role in monitoring and evaluating the performance of the dams during the construction as well as operation.

In general it is observed that Dam Instrumentation is somewhat neglected part in Dam maintenance. Instruments are installed in or on the Dam Body. However due to poor Maintenance they are not functioning. It is must for field officers to recognize importance of data derived from instruments and its analysis to upkeep of Dams in safe condition.

4.2 Instrumentation in Earthen Dams :

1. Pore Pressure Meter :

They are installed in bore holes drilled below the foundation or through already completed embankment. Hence cannot be repaired or replaced.

2. Casagrande /Standpipe Piezometers :

These are used for measuring pore water pressure in soil. These instruments can be installed at any time at desired location after completion of construction of the dam.

1. Twin Tube Piezometers :

These are also used for measuring pore water pressure in earthen dam. These are installed in foundation and embankment during construction of dam. If PVC pipes are found chocked due to leached material then it can be cleaned with CuSo4. If pipes are cut / broken then it cannot be replaced as those are in body of dam. Outside measuring assembly can be repaired. Periodical maintenance, reading and calibration are of utmost important.

4. Earth Pressure Cells :

These are installed in the foundation. The cables which are outside the body can be replaced if damaged. The sensor cannot be repaired or replaced.

5. Settlement Gauges (Surface Settlement Gauges/Vertical Cross Arms) :

These are used for measuring settlement in earth fill dam, rock fill dam and high embankment. Initially when the dam is under construction these instruments are installed.

Settlement of dam is more in initial period, which gradually decreases and it is almost nil after certain period. As such these gauges also do not show settlement after few years.

6. Slope Indicator :

This is installed in foundation with one end at bottom and other at top of the dam. It measures horizontal and vertical movement of the dam. This can be replaced.

4.3 Instrumentation in Concrete / Masonry Dams :

1. Stress meters :

The stress meters measure stresses inside the dam body. These instruments are embedded in concrete/masonry during construction stage hence cannot be repaired or replaced.

2. Strain Meter/ No Stress Strain Meter :

The strain meters measures the deformation in the structure at the particular location due to strain, creep, temperature etc. The main purpose is to determine the stress distribution in the concrete dam during and after construction of dam. Since instrument is installed in the body of the dam it cannot be repaired or replaced.

3. Uplift pressure cells

The bowl type uplift pressure cells are provided in the foundation of dam. Uplift pressure cell is used for monitoring uplift pressure of water in the foundation of dam and concrete structure. The pressure cell pipes can be cleaned if choked. The pressure gauges can be repaired or replaced.

4. Plumb Bob /Co-Ordimeter :

Conventional / Inverted Plumb Bob is used to measure deflection of the dam body. It measures the horizontal displacement in dam's foundation and abutment. Plumb bob can be repaired or replaced.

5. Thermocouples/ Thermometers :

These are used to measure the temperature variations in the body of concrete dam. These are installed in layers at various levels and can not be replaced or repaired after construction.

6. Long Gauge Extensometer :

It is used to measure the deformation/displacement in the foundation of the concrete dam. Once it fails to function can not be repaired.

7. Joint meters :

The joint meters measure the opening of the joints across which they are embedded. As such they are located near the joints.

4.4 Status Of Dam Instrumentation In The Region :

Considering the fact that most of the instruments were non-functional from many years, Govt. of Maharashtra appointed a committee to study these instruments. The recommendations of the committee were accepted and incorporated in G.R. धसुसं २०१४(६२१/१४)/ सिं.व्य. (कामे) Dated. 31/12/2015. Accordingly to every dam owner, it is informed by Dam Safety Organization to update the list of instruments at the dam site. In this report the updated details of instruments are considered.

The status of dam instrumentation in the Amravati region is given in table No.4.1. Similarly the details of mortality of instruments is given in table No.4.2 and comparison of mortality rate with respect to previous year is given in table no. 4.3

4.5 Observations

1) Various instruments numbering 334 have been installed on the 10 dams. Out of which 23 were working and 311 were not working i.e. 93.11% instruments are in non working condition.
2) As for no dam instrument data reading are available so no Instrumentation data analysis report have been prepared for Amravati region.
3) The observations of the instruments should be taken regularly and need to be sent to D.S.O. Nashik for analysis.
4) Comparison of mortality rate of instrument as compared to last year is given as per table No.4.3.

Table No.4.1
DAMWISE STATUS OF DAM INSTRUMENTS INSTALLED ON LARGE DAMS.
IN AMRAVATI REGION

Sr. no.	Name of Dam	Instrument Name	Instrument Type	Year of Installation	Total	Functional Status Functioning/ Non functioning		Remark
						F	N.F.	
1.	2.	3.	4.	5.	6.	7.	8.	9.
Chief Engineer,(W.R) Amravati								
1	Upper Pus	Stand pipe Piezometer	Hydrolic	-	64	0	64	No data
2	Upper Wardha	Conventional plumb bob	Mechanical	1996	1	0	1	
		Uplift Pressure Cell	Hydrolic	-	14	0	14	
		Stand Pipe Piezometers	Hydrolic	1997	37	5	32	
3	Bembala	Uplift Pressure cell	Hydrolic	2014	12	0	12	No data
		Plumb bob(conventional)	Mechanical	2008	1	0	1	
		Plumb bob(Inverted)	Mechanical	2008	1	0	1	
4	Arunawati	Cassagrande type piezometer	Hydrolic	1994	10	0	10	*As per post monsoon report 2021
		Twin tube piezometer*	Hydrolic		06*	0*	06*	
		Stand pipe Piezometer	Hydrolic		11	0	11	
5	Adan	Cassagrande type piezometer	Hydrolic		17	17	0	*As per post monsoon report 2021
		Twin tube piezometer*	Hydrolic		20*	0*	20*	
		Stand pipe Piezometer	Hydrolic	-	33	0	33	
6	Purna	Uplift Pressure cell #	Hydrolic		12#	00#	12#	# As per IRD's report dated 19/01/2018
		Conventional plumb bob	Mechanical	2006	1	0	1	No data
CE Wise Total for 6 Dams				**TOTAL**	**240**	**22**	**218**	

Sr. no.	Name of Dam	Instrument Name	Instrument Type	Year of Installation	Total	Functional Status Functioning/ Non functioning		Remark
						F	N.F.	
1.	2.	3.	4.	5.	6.	7.	8.	9.
Chief Engineer,(SP) Amravati								
7	Wan	Plumb bob	Mechanical	2001	1	0	1	
		Uplift Pressure Cell	Hydrolic	1998	41	0	41	
8	Katepurna	Twin Tube piezometer	Hydrolic	1975	9	0	9	Not Working
		Uplift pressure cell	Hydrolic	1975	5	0	5	
9	Nalganga	Twin tube piezometer	Hydrolic		30	0	30	Need to Installed
10	Khadakpurna	Plumb Bob*	Mechanical	2013	1*	1*	0*	*As per post monsoon report 2021
		Uplift Pressure Cell	Hydrolic		7	0	7	Need to Installed
CE Wise Total for 4 Dams					**94**	**1**	**93**	
Amravati Region Total for 10 Dams					**334**	**23**	**311**	

Note- # As per IRD's inspection note dated 19-01-2018 foreworded videletter no. 89 dated 30/01/2018, there are 06 no.of uplift pressure cells at RD 900m & 06 no.at RD 980m

Table No 4.2

Mortality Status of instruments installed on large dams (Amravati)

Sr. No.	Type of Instruments	Number Of Instruments			
		Total	Working	Non-Working	Mortality (%)
1	2	3	4	5	6
(A)	**Earth Dams**				
1	Casagrande / Stand pipe piezometers /Vibrating	172	22	150	87.21
2	Twin tube piezometers	65	0	65	100
3	Horizontal/Vertical device / Cross arm surface settlement plug	0	NA	NA	NA
4	Earth pressure cells	0	NA	NA	NA
5	Slope indicator	0	NA	NA	NA
Total		**237**	**22**	**215**	**90.72**
(B)	**Masonry Dams**				
1	Pore pressure meters	0	NA	NA	NA
2	Stressmeter	0	NA	NA	NA
3	Strainmeter/ No stress-strain meter	0	NA	NA	NA
4	Uplift pressure cells	91	0	91	100
5	Plumb bob/ Inverted Plumb Bob / co-ordimeter	6	1	5	83.33
6	Long Gauge extensometer, Multiple Bore hole extensometer	0	NA	NA	NA
7	Thermometers	0	NA	NA	NA
8	Jointmeters / Dial Gauge	0	NA	NA	NA
9	Tiltmeter	0	NA	NA	NA
Total		**97**	**01**	**96**	**98.97**
	Instruments in	**Total**	**Working**	**Non Working**	**Mortality**
A)	Earth Dams	**237**	**22**	**215**	**90.72**
B)	Masonry Dams	**97**	**01**	**96**	**98.97**
	Grand Total	**334**	**23**	**311**	**93.11**

Table No. 4.3
Comparision of instrumentation with Last Year ADHSR

Year		HSR-2020					HSR-2021				
Sr. No.	Name of Chief Engineer	Total Dams	Total Instruments	Functioning	Not-Functioning	% functioning	Total Dams	Total Instruments	Functioning	Not-Functioning	% functioning
1	Chief Engineer (W.R), Amravati	6	202	22	180	10.89	6	240	22	218	9.17
2	Chief Engineer (S.P.),Amravati	4	94	0	94	0.00	4	94	01	93	1.06
	Total	**10**	**296**	**22**	**274**	**7.44**	**10**	**334**	**23**	**311**	**6.89**

Part-5

Annual Performance Report of Meteorological Instruments

Part-5 : Annual Performance Report of Meteorological Instruments

5.1 General :

Hazard potential of dam depends upon the possible hazard it poses to population on the downstream during flood. In case of gated spillways, generally flood is considered to impinge when reservoir is at F.R.L. If flood forecasting and warning systems are in place, flood impingement can be considered at lower when F.R.L. considering prior depletion.

The establishment of hydro-meteorological stations in the vicinity of every Class-I dam and rain gauge network in its catchments assumes vital importance due to its role in flood forecasting and warning. The hydro-meteorological station shall be capable of recording data relating to, among other parameters, rainfall, atmospheric pressure, maximum & minimum temperature and humidity, wind speed, wind direction, height of waves and reservoir water temperature. It is important that a representative proportion of the rain gauge network is linked to flood forecasting and warning control centre by telemetry.

5.2 Observations :

From Pre/Post Monsoon Reports it is seen that the ANNEXURE-IV which is "**Checklist of Various Meteorological Instruments installed on Dams**" is not filled properly and quantity of number of instruments varies from year to year. As this status of instruments is submitted to C.W.C., New Delhi. Field authorities need to make sure that correct information is filled. Table 5.1 gives thedamwise status of the meteorological instruments, and Table 4.2 gives the status of morality of meteorological instruments installed in the region.

1. As per Pre/Post Monsoon reports of Amravati region it is seen that 138 various meteorological instruments installed on dams out of which 94 are functioning and 44 are non functioning. The non-functioning should be repaired/replaced on priority.
2. As per the government circular CDA-1013/(207/13)/CAD(works)/ August-2013. It is mandatory to install **Pan Evaporimeter** to measure evaporation on all major and medium projects.

Efforts should be taken by field officers to establish automatic flood warning systems which will help in saving lives, livestock and property and will invariantly contribute to lessening of the overall impact of floods.

Table- 5.1

Status of Dam Meteorological Instrumentation

Sr. No.	Name of dam with Location	Name of Instruments	No.of Instruments	Performance		Status of Data analysis
				Working	Non working	
1	2	3	4	5	6	7
1	Nalganga Dist-Buldana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Rainguage in the catchment(ordinary)	1	1	-	Data collection is done at field level
		3)Pan evaporimeter	1	-	1	Data collection is done at field level
		4)Wind velocity recorder	1	1	-	Data collection is done at field level
		5)Wind direction recorder	1	1	-	Data collection is done at field level
2	Gyanganga Dist-Buldana	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
3	Katepurna Dist-Akola	1)Rainguage on dam(ordinary)	1	**1**	1	Data collection is done at field level
		2)Rainguage in the catchment(ordinary)	3	3	-	Data collection is done at field level
		2)Rainguage on dam (self records)	1	1	-	Data collection is done at field level
		3)Pan evaporimeter	1	1	-	Data collection is done at field level
4	Shekdari Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
5	Shahanoor Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Raingauge in catchment(Ordinary)	1	1	-	Data collection is done at field level
		3)Pan evaporimeter	1	-	1	Data collection is done at field level
6	Purna medium proj. Dist-Amravati	1)Rainguage on dam(ordinary) 2)Rainguage in the catchment(self recording)	1 3	1 -	- 3	Data collection is done at field level
7	Lower Pus Dist-yavatmal	1)Rainguage on dam(ordinary) 2) Pan evapometer	1 1	1 -	- 1	Data collection is done at field level
8	Bembla Dist-yavatmal	1)Rainguage on dam(ordinary) 2) Rainguage in the catchment(ordinary) 3)Wind velocity recorder 4) Pan evaporimeter 5) Water Stage Recorder	1 5 1 1 1	1 5 1 1 1	- - - - -	Data collection is done at field level
9	Pus Dist-yavatmal	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level -
10	Mun Dist-Buldana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is

Sr. No.	Name of dam with Location	Name of Instruments	No.of Instruments	Performance		Status of Data analysis
				Working	Non working	
1	2	3	4	5	6	7
						done at field level
11	Khirkund Dist-Amravati	1)Rainguage on dam(ordinary) 2)Rainguage in the catchment (ordinary)	1 1	1 -	- 1	Data collection is done at field level
12	Upper Wardha Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2) Rainguage in the catchment (Self recording)	1	1	-	Data collection is done at field level
		3)Pan evaporimeter	1	1	-	Data collection is done at field level
		4) Wind velocity meter.	1	1	-	Data collection is done at field level
13	Wan Dist-Akola	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Rainguage in the catchment(ordinary)	2	-	2	Data collection is done at field level
		3) Wet dry thermometer	1	1	-	Data collection is done at field level
		4) pan evaporimeter	1	1	-	Data collection is done at field level
14	Adan Dist-Akola	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Rainguage in the catchment(ordinary)	2	-	2	Data collection is done at field level
		2)Pan evaporimeter	1	1	-	Data collection is done at field level
		3)Wave Height Recorder	1	-	1	Data collection is done at field level
15	Popatkhed Dist. Akola	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
16	Arunavati Dist-Yavatmal	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Rainguage in the catchment(self records)	5	5	-	Data collection is done at field level
		3)Rainguage on dam (self records)	1	-	1	Data collection is done at field level
		4)Pan evaporimeter	1	1	-	Data collection is done at field level
17	Chandrabhaga Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Rainguage in the catchment(self recorder)	2	2	-	Data collection is done at field level
		3)Pan evaporimeter	1	1	-	Data collection is done at field level
18	Chargad Dist.-Amarawati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level

Sr. No.	Name of dam with Location	Name of Instruments	No.of Instruments	Performance		Status of Data analysis
				Working	Non working	
1	2	3	4	5	6	7
19	Pentakli Dist-Buldhana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	1	-	Data collection is done at field level
20	Khadakpurna Dist-Buldhana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
21	Paldhag Dist-Buldana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
22	Mas Dist-Buldana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
23	Koradi Dist-Buldana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
24	Botha Dist-Buldana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
25	Morna Dist-Akola	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Rainguage on dam (self records)	1	-	1	Data collection is done at field level
		3) Pan evaporimeter	1	-	1	Data collection is done at field level
26	Nirguna Dist-Akola	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Rainguage on dam (self records)	1	-	1	Data collection is done at field level
		3) Pan evapoimeter	1	-	1	Data collection is done at field level
27	Uma Dist-Akola	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
28	Patur Dist-Akola	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
29	Ekburji Dist-Washim	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
30	Sonal Dist-Washim	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
31	Malkhed Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
32	Wai Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
33	Khari Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
34	Sadrabadi Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level

Sr. No.	Name of dam with Location	Name of Instruments	No.of Instruments	Performance		Status of Data analysis
				Working	Non working	
1	2	3	4	5	6	7
35	Mandwa Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
36	Salai Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
37	Nagthana Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
38	Satnoor Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
39	Nanduri Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
40	Sawalikheda Dist-Amravati	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
41	Waghadi Dist.-Yavatmal	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
42	Goki Dist – Yavatmal	1)Rainguage on dam(ordinary)	1	1	- -	Data collection is done at field level
43	Saikheda Dist.-Yavatmal	1)Rainguage in the catchment(self records)	1	-	1	Data collection is done at field level
		2)Pan evaporimeter	1	-	1	Data collection is done at field level
44	Muchi Dist.-Yavatmal	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level
45	Khadakdoh Dist.-Yavatmal	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level
46	Pendhari Dist.-Yavatmal	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level
47	Antargaon Dist.-Yavatmal	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level
48	Nawargaon Dist.-Yavatmal	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level
49	Rampur Dist.Yavatmal	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level
50	Khandni Dist.-Yavatmal	1)Rainguage on dam(ordinary)	1	-	1	Data collection is done at field level
51	Mandwa Dist-Buldana	1)Rainguage on dam(ordinary)	1	1	-	Data collection is done at field level
52	Pimlgaon chambhare Dist-Akola	1)Rainguage on dam(ordinary)	1	1	–	Data collection is done at field level
53	Mozari Dist-Akola	1)Rainguage on dam(ordinary)	1	1	–	Data collection is done at field level
54	Ghota Dist-Akola	1)Rainguage on dam(ordinary)	1	1	–	Data collection is done at field level
55	Gawalndoh Dist-Yavatmal	1)Rainguage on dam(ordinary)	1	1	–	Data collection is done at field level
56	Borgaon Dist-Yavatmal	1)Rainguage on dam (self recorder)	1	–	1	Data collection is done at field level

Sr. No.	Name of dam with Location	Name of Instruments	No.of Instruments	Performance		Status of Data analysis
				Working	Non working	
1	2	3	4	5	6	7
57	Karanji Dist.-Yavatmal	1)Rainguage on dam(ordinary)	1	–	1	Data collection is done at field level
58	Loni Dhavalgiri Dist.-Amarawati	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
59	Kawara Nalla Dist.-Amarawati	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
60	Utawale Project Dist.-Buldana	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
61	Dhorapgaon Dist.-Buldhana	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
62	Munjala Dist.-Yavatmal	1)Raingauge on dam(ordinary)	1	-	1	Data collection is done at field level
63	Sapan Dist-Amarawati	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
64	Dagadparva Dist-Akola	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
65	Adol Dist-Washim	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
66	Vyagranalla Dist-Buldhana	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
67	Vishwamitri Dist-Akola	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
68	Chandi Dist-Amarawati	1)Raingauge on dam(ordinary)	1	1	-	Data collection is done at field level
		Total	**121**	**84**	**37**	

Table No. 5.2
Mortality status of Meteorological Instruments Installed on Dams In Amravati Region

Sr. No.	Type of Instruments	Number Of Instruments			
		Total	Working	Non-Working	Mortality (%)
1	**2**	**3**	**4**	**5**	**6**
1	Rain gauge on dam (ordinary)	67	52	15	22.38
2	Rain gauge on dam (Self recorder)	04	1	4	25
3	Rain gauge in catchment (ordinary)	12	10	02	16.67
4	Rain gauge in catchment (Self recorder)	11	8	3	27.27
5	Pan Evapometer	23	7	16	69.56
6	Wind Velocity recorder	03	3	-	0.00
7	Wind direction recorder	01	1	-	0.00
8	Wet/dry bulb thermometer	00	1	-	0.00
9	Water stage recorder	01	1	-	0.00
10	Wave height recorder	01	0	1	100.00
Total		**121**	**84**	**37**	**30.57**

Part-6

National Committee on Dam Safety (NCDS) Documents

Part- 6 National Committee on Dam Safety (NCDS) Documents

Importance of National Committee on Dam Safety (NCDS) Documents:

Central Water Commission (CWC) has laid down various guidelines covering the standardized dam safety practices-essentially guiding the dam owners in preparation of Emergency Action Plans, Periodical Dam Safety inspections, comprehensive dam Safety evaluation and appropriate institutional framework for dam safety. Their implementation is emphasized during the meetings of National Committee on Dam Safety (NCDS) and through the communications sent in this regard.

During the 34th meeting held at Chennai in March 2015 it was requested to all the Dam owners to take necessary steps for preparation of EAPs & other documents & report to NCDS Secretariat about the number of Dams for which EAPs & other documents have been prepared, along with the target dates for the preparation of EAPs & other documents for the remaining Dams.

The documents to be prepared as per National Committee on Dam Safety are as under & these shall be properly maintained and kept up to date by including latest information available.

1. EAP
2. R.O.S & G.O.S.
3. Data Book
4. O & M manual
5. Record Drawing & Completion Report,

1. EAP : Emergency Action Plan:

An Emergency action plan is a formal plan that identifies potential emergency conditions at a dam prescribes the procedures to be followed to minimize property damage and loss of life. The EAP contains procedures and information to assist the dam owner in taking necessary actions in time to moderate or alleviate the problems, in addition to issuing early warning & notification messages to responsible emergency management authorities,viz.,District Magistrate/Collector, Armed Forces, Paramilitary forces, Project Authorities & other Central/State Agencies. It also contains inundation maps to show the emergency management authorities of the critical areas for necessary relief and rescue actions in case of an emergency. In a nutshell, it outlines "who does, what, where, when and how" in an emergency situation or unusual occurrence affecting the Dams. The Emergency Action Plan has to be prepared as per CWC Guidelines are available on official website

https://damsafety.in/ecm-includes/PDFs/Guidelines_Developing_EAP_Dam.pdf

2. R.O.S. (Reservoir operation schedule) & G.O.S. (Gate operation schedule) :

It is very necessary to lay down operating procedures of all storage reservoirs with the objective to limit the flood stages in the river downstream and with maximum feasible utilization of the flood capacity of the river channel downstream of reservoirs, consistent with the safety of the dam. A proper reservoir operation schedule should be in place.

For this purpose a schedule of opening and closing the gates to limit the reservoir levels to preset gauges should be laid down. Schedule for the dam as per operation & maintenance manual should be strictly adhered. The entire capacity of reservoir is used for active conservation. When the reservoir rises above active conservation, operation will be in accordance with the standing operation procedures. Inflow forecasting arrangement should be made for easy operation of gates. The Engineer in charge should inform immediately to the flood maintenance engineer downstream and flood –fighting center of the releases from the reservoir.

3. Data book:

Proper assessment of dam safety involves a thorough review of design, construction and performance records prior to conducting a field examination. The Data Book is an unpublished document which is prepared before the initial safety inspection of each dam. This book is abbreviated, convenient source of information, summarizing all pertinent records and history related to the safety of a dam and is a reference for the evaluation team. This Data Book should answer most questions about the dam. A list of reference is included if additional information is needed. Continual updating of the Data Book will be required as future inspections are made, new problems arise, new investigations are undertaken and remedial treatments performed. Documentation of all projects may be done in the Data Book format which is the primary data base for the team evaluating the safety of a dam. (Guidelines on standardized Data Book format are available at http://www.cwc.gov.in/ Dam_safety.html)

4. O & M Manual:

It is desirable that a separate manual is available with the officers .The officers Incharge of such works are requested to personally go through the manual and maintain the records from time to time in such a manner as to give their successors complete and correct idea of the state of each of the several storage works in their charge and the different standing orders on all matters concerning the works. This will enable them to tackle problems as they arise, by quickly referring to the manual as far as possible without having to depend on the office to give information. The complete set of manual for each of the storage works should be personally handed over to successor by each concerned officer.

Copies of the maintenance manual shall be maintained at all offices right from sectional office to Circle office.

It is also necessary that the manuals are inspected at the time of inspection by the superior officers. Record of handing over and inspection should be maintained.

5. Record Drawing & Completion Report :

The importance of record drawings & completion report as an archival data need not be emphasized. All efforts should be made by field engineers to prepare Record Drawing & Completion Report and store them for future reference.

Table-6.1 Status of Emergency Action Plan (EAP)

Sr. No.	Name of CE	Total	Received	Not Received	Remarks
1	CE (WR) Amravati	11	10	01	All EAP must be updated as per CWC guide lines 2016 & copy of EAP should be made available to DSO.
2	CE (SP) Amravati	12	09	03	
3	Private Dam	00	00	00	
	Total	**23**	**19**	**04**	

Table-6.2 Status of Reservoir Operation Schedule (ROS)

Sr. No.	Name of CE	Total	Received	Not Received	Remarks
1	CE (WR) Amravati	09	09	00	Updated copy of ROS should be made available to DSO.
2	CE (SP) Amravati	08	08	00	
3	Private Dam	00	00	00	
	Total	**17**	**17**	**00**	

Table-6.3 Status of Gate Operation Schedule (GOS)

Sr. No.	Name of CE	Total	Received	Not Received	Remarks
1	CE (WR) Amravati	09	07	02	Updated copy of GOS should be made available to DSO.
2	CE (SP) Amravati	08	08	00	
3	Private Dam	00	00	00	
	Total	**17**	**15**	**02**	

Table-6.4 Dam Wise Status of GOS & ROS, EAP (Class-I Dams)

Sr.No.	Name of dam	EAP	ROS	GOS
1	2	3	4	5
Amravati Region				
A) Chief Engineer (WR) Amravati				
I) Superintending Engineer.Yavatmal.Irrigation.Circle.(M), Yavatmal				
1) Executive Engineer,Arunavati Pro.Dn. Digras.				
1	Adan	R(1990)	R(2008)	R(1989)
2	Arunavati	R	R(2003)	R(1996)
2) Executive Engineer, Bembla Pro.Dn. Yavatmal.				
3	Bembla	R(2010)	R(2020)	R(2020)
3) Executive Engineer, Yavatmal Irrigation Division, Yavatmal.				
4	Lower Pus	R(1983)	R(2008)	R(1989)
5	Upper Pus(UG)	NR	Not Applicable	Not Applicable
	Total	**5**	**4**	**4**
	(R) Received	**4**	**4**	**4**
	(NR) Not Rceived	**1**	**0**	**0**
II) Superintending Engineer. Upper.Wardha.Irrigation.Circle, Amravati				
1) Executive Engineer, Medium & Minor Irrigation Projrct Division, Achalpur.				
6	Shahanoor	R	R(2009)	NR
7	Chargad (UG)	R(2003)	Not Applicable	Not Applicable
8	Chandrabhaga	R(2006)	R(2010)	R(2005)
9	Purna	R(2010)	R(2015)	NR
2) Executive Engineer, Amravati Medium Project Division, Amravati.				
10	Sapan	R(2010)	R(2010)	R
3) Executive Engineer, Upper Wardha Dam Division Amravati.				
11	Upper Wardha	R(2015)	R(2016)	R(2015)
	Total	**6**	**5**	**5**
	(R) Received	**6**	**5**	**3**
	(NR) Not Rceived	**0**	**0**	**2**
B) Chief Engineer (SP) Amravati				
I) Superintending Engineer.Akola.Irrigation.Circle, Akola				
1) Executive Engineer,Buldana Irrigation Division, Buldana.				
1	Nalganga	R(2012)	R(2008)	**R(1989)**
2	Gyanganga(UG)	R	Not Applicable	Not Applicable
3	Dongarshewali (UG)	NR	Not Applicable	Not Applicable

Sr.No.	Name of dam	EAP	ROS	GOS
1	2	3	4	5
4	Pentakli	R	R(2010)	R(2014)
5	Mun	R(1991)	**R(2009)**	**R**
6	Khadakpurna	R(2011)	R(2009)	R(2009)
2) Executive Engineer, Akola Irrigation Division, Akola.				
7	Katepurna	R	R(2008)	**R(1989)**
8	Dagadparwa	R(2008)	R(2008)	R(2008)
9	Wan	R(2009)	R(2009)	R(2009)
3) Executive Engineer, Minor Irrigation Project, Akola.				
10	Khirkund (UG)	NR	Not Applicable	Not Applicable
11	Popatkhed	R(2005)	R(2015)	R (2015**)**
	Total	**11**	**8**	**8**
	(R) Received	**9**	**8**	**8**
	(NR) Not Rceived	**2**	**0**	**0**
II) Superintending Engineer.Amravati.Irrigation.Project.Circle, Amravati				
1) Executive Engineer,Irrigation Project & Water Resorce Investigation Department				
12	Ghungshi Barrage	NR	Not Applicable	Not Applicable
	Total	**1**	**1**	**1**
	(R) Received	**0**	**0**	**0**
	(NR) Not Received	**1**	**1**	**1**
	PRIVATE DAMS –No Class-I Private Dams in Amaravati Region			

Table-6.5 Status of Other NCDS Documents (Class-I Dams)

Sr. No.	Name of CE	Total no. Of dams	Completion Report		Record Drawing		Data Book		O&M Manual	
			Received	Not Received	Received	Not Received	Received	Not Received	Received	Not Received
1	CE (WR) Amravati	11	2	9	5	6	6	5	4	7
2	CE (SP) Amravati	12	2	10	4	8	4	8	3	9
	Total	**23**	**4**	**19**	**9**	**14**	**10**	**13**	**7**	**16**

Table-6.6

Dam Wise Status of Other NCDS Documents

Sr. No.	Name of dam	Completion Report	Record Drawing	Data Book	O& M Manual
1	2	3	4	5	6
Amravati Region					
A) Chief Engineer (WR) Amravati					
I) Superintending Engineer.Yavatmal.Irrigation.Circle.(M), Yavatmal					
1) Executive Engineer,Arunavati Pro.Dn. Digras.					
1	Adan	R	R	R	R
2	Arunavati	NR	NR	NR	NR
2) Executive Engineer, Bembla Pro.Dn. Yavatmal.					
3	Bembla	NR	R	NR	NR
3) Executive Engineer, Yavatmal Irrigation Division, Yavatmal.					
4	Lower Pus	NR	R	R	R
5	Upper Pus	NR	R	R	R
	Total	**5**	**5**	**5**	**5**
	(R) Received	**1**	**4**	**3**	**3**
	(NR) Not Rceived	**4**	**1**	**2**	**2**
II) Superintending Engineer. Upper.Wardha.Irrigation.Circle, Amravati					
1) Executive Engineer, Medium & Minor Irrigation Projrct Division, Achalpur.					
6	Shahanoor	NR	NR	NR	NR
7	Chargad (UG)	NR	NR	R	NR
8	Chandrabhaga	NR	NR	R	NR
9	Purna	NR	NR	NR	NR
2) Executive Engineer, Amravati Medium Project Division, Amravati.					
10	Sapan	NR	NR	NR	NR
3) Executive Engineer, Upper Wardha Dam Division Amravati.					
11	Upper Wardha	R	R	R	R
	Total	**6**	**6**	**6**	**6**
	(R) Received	**1**	**1**	**3**	**1**
	(NR) Not Received	**7**	**5**	**3**	**5**
B) Chief Engineer (SP) Amravati					
I) Superintending Engineer.Akola.Irrigation.Circle, Akola					
1) Executive Engineer,Buldana Irrigation Division, Buldana.					
1	Nalganga	NR	R	R	R
2	Gyanganga	NR	R	R	NR

Sr. No.	Name of dam	Completion Report	Record Drawing	Data Book	O& M Manual
1	**2**	**3**	**4**	**5**	**6**
3	Khadakpurna	NR	NR	NR	NR
4	Dongarshewali(UG)	NR	NR	NR	NR
5	Pentakli	NR	NR	NR	NR
6	Mun	R	R	R	R
2) Executive Engineer, Akola Irrigation Division, Akola.					
7	Katepurna	NR	NR	NR	NR
8	Dagadparwa	NR	NR	NR	NR
9	Wan	R	R	R	R
3) Executive Engineer, Minor Irrigation Project, Akola.					
10	Khirkund	NR	NR	NR	NR
11	Popatkhed	NR	NR	NR	NR
	Total	**11**	**11**	**11**	**11**
	(R) Received	**2**	**4**	**4**	**3**
	(NR) Not Rceived	**9**	**7**	**7**	**8**
II) Superintending Engineer.Amravati.Irrigation.Project.Circle, Amravati					
1) Executive Engineer,Irrigation Project & Water Resorce Investigation Department					
12	**Ghungshi Barrage**	NR	NR	NR	NR
	Total	**1**	**1**	**1**	**1**
	(R) Received	**0**	**0**	**0**	**0**
	(NR) Not Received	**1**	**1**	**1**	**1**
	PRIVATE DAMS –No Class-I Private Dams in Amaravati Region				

Part-7

Dam Health & Rehabilitation Monitoring Application (DHARMA)

Part-7 DHARMA: Dam Health and Rehabilitation monitoring application

Introduction :

Dam health & Rehabilitation Monitoring application (DHARMA) is a web based asset management software to support the effective collection and management of authentic asset and health data for all large dams in India and address key dam safety challenges of

i)Insuring Completeness of information.

ii) Bring stake holders together

iii) Effectively managing asset inventory.

iv) Assess soundness of Dam health.

Design and Development :

DHARMA software consist of seven modules.

i) Project features

ii) Project portfolio

iii) Engineering features.

iv) Asset health.

v) Asset rehabilitation.

vi) Stake holders and

vii) Document library.

The first three modules (i to iii consist of mostly static data, to be enter once and rarely undergo a change where as modules iv) and v) will be dynamic and requires regular updating with information associated with inspections investigations, instrumentation and rehabilitation works. Modules vi) and vii)contain information useful for reference.

All field EE's are required to fill up attached two forms (Dam Data Manager & Dam Health Engineer) for each Dam in their jurisdiction by 15th July 2021 & its review will be taken by Hon. DG, MERI, Nashik by 15th Aug 2021.

Dam Data Manager

1.	Date of Application:	< dd/mm/yyyy>		
2.	Type of User:	Dam Data Manager		
3.	Name of the Applicant:	<Title>. <Name>		
4.	Designation:			
5.	Name of the Organization:			
6.	Complete Postal Address:			
7.	Email ID:			
8.	Mobile Number:		Office Tel. Number:	
9.	Current Responsibilities:	☐ Coordinating Dam Safety ☐ Water Resource Management ☐ Dam Design ☐ Dam Construction / Rehabilitation ☐ Dam Operations ☐ Academic / Research ☐ Other: <please specify>		
10.	Viewing Permission Required for:	☐ Project Features ☐ Project Portfolio ☐ Engineering Features		
11.	Editing Permission Required for:	☐ Project Features ☐ Project Portfolio ☐ Engineering Features		
12.	Provide List of Dams			

Please select out of the choice provided; add separate sheets for providing additional information.

Declaration: I, hereby declare that the information provided in the application is true. I further declare that I will not use the information collected from DHARMA software for any unlawful activities and / or to the detriment of the Central or State Governments.

Signature and Seal / stamp of the Applicant:	Signature:	
	Name:	
	Designation:	
	Seal / Stamp:	

Please send the completed Application Form to the concerned Licensee.

DHARMA Application User Registration F

Dam Health Engineer

1.	Date of Application:	< dd/mm/yyyy>		
2.	Type of User:	Dam Health Engineer		
3.	Name of the Applicant:	<Title>. <Name>		
4.	Designation:			
5.	Name of the Organization:			
6.	Complete Postal Address:			
7.	Email ID:			
8.	Mobile Number:		Office Tel. Number:	
9.	Current Responsibilities:	☐ Coordinating Dam Safety ☐ Water Resource Management ☐ Dam Design ☐ Dam Construction / Rehabilitation ☐ Dam Operations ☐ Academic / Research ☐ Other: <please specify>		
10.	Viewing Permission Required for:	☐ Project Features ☐ Project Portfolio ☐ Engineering Features		
11.	Editing Permission Required for:	☐ Project Features ☐ Project Portfolio ☐ Engineering Features		
12.	Provide List of Dams			

Please select out of the choice provided; add separate sheets for providing additional information .

Declaration: I, hereby declare that the information provided in the application is true. I further declare that I will not use the information collected from DHARMA software for any unlawful activities and / or to the detriment of the Central or State Governments.

Signature and Seal / stamp of the Applicant:	Signature:	
	Name:	
	Designation:	
	Seal / Stamp:	

Please send the completed Application Form to the concerned Licensee.

Table 7.1 Status of DHARMA Information updation

Sr. No	Name of Dam	NRLD registration number	Dharma data filling status (%)
A) Chief Engineer (WR) Amravati			
I) Superintending Engineer.Yavatmal.Irrigation.Circle.(M), Yavatmal			
1) Executive Engineer, Yavatmal Irrigation Division, Yavatmal.			
1	Lower Pus	MH019MH1012	11
2	Pus	MH09HH0268	11
2) Executive Engineer,Arunavati Pro.Dn. Digras.			
1	Adan	MH09HH0660	11
2	Arunavati	MH09MH1343	11
3) Executive Engineer Bembla Projet Division, Yavatmal			
1	Bembla	MH09MH2138	10
II) Superintending Engineer. Upper.Wardha.Irrigation.Circle, Amravati			
1) Executive Engineer, Medium & Minor Irrigation Projrct Division, Achalpur.			
1	Shahnoor	MH09HH1212	11
2	Chandrabhaga	MH09HH1801	78
3	Chargad	MH09HH1621	10
4	Purna	MH09HH1803	42
2) Executive Engineer, Amravati Medium Project Division, Amravati.			
1	Sapan	MH09HH2139	10
3) Executive Engineer, Upper Wardha Dam Division Amravati			
1	Upper Wardha	MH09HH1319	62
B) Chief Engineer (SP) Amravati			
I) Superintending Engineer.Akola.Irrigation.Circle, Akola			
1) Executive Engineer, Akola Irrigation Division, Akola.			
1	Katepurna	MH09MH455	17
2	Dagadparwa	MH09LH2184	11
3	Wan(Akola)	MH09HH1560	51
2) Executive Engineer,Buldana Irrigation Division, Buldana.			
1	Nalganga	MH09HH0152	13
2	Gyanganga	MH09HH0267	56
3	Dongarshewali	MH09MH2136	11
4	Pentakli	MH09MH1624	26
5	Mun	MH09HH1492	11
6	Khadakpurna	MH09HH2137	11

Sr. No	Name of Dam	NRLD registration number	Dharma data filling status (%)
3) Executive Engineer, Minor Irrigation Project, Akola.			
1	Khirkund	MH09HH1516	11
2	Popatkhed	MH09HH1656	10
II) Superintending Engineer.Amravati.Irrigation.Project.Circle, Amravati			
1) Executive Engineer,Irrigation Project & Water Resorce Investigation Department			
1	Ghungshi Barrage	MH09MH2217	08

Part-8

Health Status of Gated Dam (As per Mechanical Organisation)

Part- 8 Health Status of Gated Dam (As per Mechanical Organisation)

8.1 General

APs per GR.NO.ID/1078/23/8/IMP/2 Dtd.10/09/1980, Dam Safety Organization has been established by Government of Maharashtra for effective monitoring the safety aspects of dam.

As per Maharashtra Government Guidelines and regulation, Chief Engineer (Mechanical), Water Resources Dept. Nashik assigned Dams gate Inspection work to Superintending Engineer, Mechanical Circle, Nashik to assure proper operation and maintenance of Dam gates

Under Superintending Engineer, Mechanical Circle, Nashik Executive Engineer, Inspection unit, Aurangabad and Executive Engineer, Sluice Gate Mfg. Division, Dapodi , Pune are looking after all the inspection works.

Division offices Conduct all pre monsoon & Post Monsoon Gate Inspection work of Government, Semi Government, & Private Dams and send Reports to related authorities for same.

After Inspection work the observed points or deficiencies are classified into various categories as given below.

Def. Category-1	*Dams with Major Deficiencies which may lead to dam failure*	*Very Serious Defects*
Def. Category-2 (2 A)& (2B)	Dams with rectifiable Deficiencies needs immediate attention	Serious Defects (2A)
		Require immediate attention (2B)
Def. Category-3	General Defects	General Defects

In the year of 2021 pre and post mansoon inspection of total 161 gated dams have been carried out by Mechanical Organization. It is to be noted that Chief engineer (Mechanical) W.R.D Nashik, prepares independently the detail Health status Report of all the gated dams inspected by mechanical Organization. This report is published and submitted to WRD and circulated to all Concern Chief Engineers.

In this Health Status Report, only the damwise number of deficiencies noted by mechanical Organization are given in this part of AHSR. For details regarding the actual deficiencies Health Status Report circulated by Mechanical Organization shall be referred.

8.2 Overall Health Statues of Gated Dams

19 Class-I gated dams in the Amravati region are inspected by Mechanical Organization.
Category -1 deficiency is not observed on any dam. Category -2 & 3 deficiencies are observed on all the 19 dams. Total 201 Category -2 deficiencies and total 1204 Category -3 deficiencies are observed on the dams in the region.

Table 8.1
Damwise and Categoriwise Number of Deficiencies Identified on Gated Dams in the Amravati Region

Health Status Report (Pre & Post) 2020 of Gated Dams Abstract											
Sr. No.	Region & Name of Dam	Number of Gated Dams as per dam Category			Report Taken Into Account	Dam category - I Difficiencies			Dam category - II Difficiencies		
		Cat-I	Cat-II	Total		Cat-I	Cat-II	Cat-III	Cat-I	Cat-II	Cat-III
1	2	3	4	5	6	7	8	9	10	11	12
	AMRAVATI										
1	Adan	1	0	1	yes	0	5	50	0	0	0
2	Arunavati	1	0	1	yes	0	17	99	0	0	0
3	Bembla	1	0	1	yes	0	12	75	0	0	0
4	Adharpus	1	0	1	yes	0	16	76	0	0	0
5	Chandrabhaga	1	0	1	yes	0	10	40	0	0	0
6	Purna	1	0	1	yes	0	16	74	0	0	0
7	Shahanur	1	0	1	yes	0	7	49	0	0	0
8	Sapan	1	0	1	yes	0	9	45	0	0	0
9	Upper vardha	1	0	1	yes	0	16	82	0	0	0

Health Status Report (Pre & Post) 2020 of Gated Dams Abstract											
Sr. No.	Region & Name of Dam	Number of Gated Dams as per dam Category			Report Taken Into Account	Dam category - I Difficiencies			Dam category - II Difficiencies		
		Cat-I	Cat-II	Total		Cat-I	Cat-II	Cat-III	Cat-I	Cat-II	Cat-III
1	2	3	4	5	6	7	8	9	10	11	12
10	Dagadparva	1	0	1	yes	0	8	46	0	0	0
11	Katepurna	1	0	1	yes	0	5	32	0	0	0
12	Wan	1	0	1	yes	0	21	77	0	0	0
13	Popatkhed	1	0	1	yes	0	10	64	0	0	0
14	Khadakpurna	1	0	1	yes	0	20	91	0	0	0
15	Pentakli	1	0	1	yes	0	9	100	0	0	0
16	Nalganga	1	0	1	yes	0	4	44	0	0	0
17	Man	1	0	1	yes	0	4	45	0	0	0
18	Lower man	1	0	1	yes	0	8	57	0	0	0
19	Paras	1	0	1	yes	0	4	58	0	0	0
	Total	19	0	19	0	0	201	1204	0	0	0

मुख्य अभियंता, जलविज्ञान व धरण सुरक्षितता सीडीओ बिल्डींगच्या मागे, दिंडोरी रोड , नाशिक - ४२२००४ दूरध्वनी :०२५३-२५३०२२७	महाराष्ट्र शासन जलसंपदा विभाग	स्वातंत्र्याचा अमृत महोत्सव	Chief Engineer, Hydrology & Dam Safety Behind C.D.O. Building, Dindori Road, Nashik – ४२२००४ Ph.No. : ०२५३-२५३०२२७

Web: www.mahahp.gov.in Email: cehpswnasik@gmail.com / cehp.nashikwrd@maharashtra.gov.in

फक्त ई-मेलद्वारे

जा.क्र.मुअ/जवधसु/धसुसं/9262 /सन २०२२ दिनांक: २८ /०९/२०२२

अति महत्वाचे

प्रति,
मुख्य अभियंता
जलसंपदा विभाग,अमरावती

विषय – दुधना लघु प्रकल्पाच्या पावसाळा उत्तर २०२१ अहवालात दर्शविण्यात आलेल्या त्रुटीबाबत...

संदर्भ – १. कार्यकारी अभियंता, यवतमाळ पाटबंधारे विभाग, यवतमाळ यांचे पत्र जा.क्र.६५४ यसिंमं/सिंचन /पा.नि.अ /२०२२, दिनांक ९/३/२०२२
२. या कार्यालयाचे पत्र जा.क्र.धसुसं/प्रशा/१४९१/२०१४, दिनांक २५/११/२०१४
३. या कार्यालयाचे पत्र जा.क्र.धसुसं/धसुविक्र.२/१९८/२०२२ दिनांक २२/६/२०२२
४. महासंचालक, मेरी, नाशिक यांची दि. ५/९/२०२२ रोजीची मंजुर टिपण्णी.

वरील संदर्भिय क्र.१ नुसार आपल्या कार्यक्षेत्रातील दुधना लघु प्रकल्पाचा पावसाळा उत्तर २०२१ अहवाल या कार्यालयास प्राप्त झाला आहे. सदर अहवालाची तांत्रिक छाननी केली असता खालील प्रमाणे गंभीर त्रुटी निदर्शनास आली आहे.

अहवालातील मुद्या क्र.२.० Earthen Embankement मधील २.९ मध्ये "After fulfillment of Dam. Heavy leakages through the downstream portion of the Dam " असे दर्शविण्यात आले आहे. तरी सदर त्रुटीचे वर्गीकरण केले असता सदर त्रुटी ही संवर्ग -१ या प्रकारात येते. संवर्ग – १ ची त्रुटी म्हणजे **"Dam with major deficiency which may lead to Dam failure ".**

संदर्भीय पत्र क्र. २ अन्वये सदर धरणाची पाहणी स्वत: क्षेत्रिय मुख्य अभियंता/ अधीक्षक अभियंता यांनी तपासणी करुन टिप्पणीत नमूद वर्ग-१ त्रुटींचे वर्गीकरण बरोबर आहे याची खात्री करावी व असे दृढीकरण करावे वा वर्गीकरण बदलणे गरजेचे असल्यास त्याबाबत धरण सुरक्षितता संघटनेस लगेचच कळवावे अशा आशयाच्या सूचना सर्व क्षेत्रिय मुख्य अभियंता/ अधीक्षक अभियंता यांना देण्याचे शासनाचे निर्देश असल्याचे अधीक्षक अभियंता धरण सुरक्षितता संघटना नाशिक यांनी या पुर्वी कळवीले आहे.

अहवालात दर्शविण्यात आलेल्या सदर त्रुटीचे गांभिर्य लक्षात घेता स्वत: क्षेत्रिय मुख्य अभियंता/ अधीक्षक अभियंता प्रत्यक्ष क्षेत्रिय स्तरावर जावून खात्री करण्यात यावी व तसे या कार्यालयास त्वरीत अवगत करावे. सदर संवर्ग -१ गंभीर त्रुटी प्रत्यक्षात आढळून आल्यास याबाबत त्वरीत उपाय योजना हाती घेण्यात याव्यात, की जेणेकरुन पुढील अनर्थ टाळणे शक्य होईल. या बाबत अधीक्षक अभियंता धरण सुरक्षितता संघटना नाशिक यांनी संदर्भ क्र.३ अन्वये आपणास ज्ञात केले आहे.

अमरावती प्रदेशाचा सन २०२१-२२ वार्षिक धरण स्थिती अहवाल मा. महासंचालक,मेरी,नाशिक यांच्या मान्यतेसाठी पाठविण्यात आले होते. संदर्भ क्र.४अन्वये मा. महासंचालक यांनी त्रुटींच्या संवर्गाबाबत त्वरीत निर्णय घेण्याचे निर्देश देण्यात आले आहेत. सदर त्रुटींचा (संवर्ग-१) अंर्तभाव धरणस्थिती अहवालात करायचे असल्याने त्रुटी दृढीकरणा बाबतची माहिती या कार्यालयास त्वरित पाठविण्यात यावी जेंणेकरून धरणस्थिती अहवाल अंतिम करणे शक्य होईल.

हे आपले माहिती व त्वरीत कार्यवाहीसाठी सस्नेह अग्रेषित.

स्थळ प्रत मा.मुख्य अभियंता यांना मान्य.

सोबत- १) संदर्भीय पत्र क्रमांक १ व २
२) छाननी अहवाल
३) संवर्ग-१ त्रुटी वर्गीकरण तक्ता

(म. श्र. आमले)
अधीक्षक अभियंता
धरण सुरक्षितता संघटना
नाशिक

BOC

EE

प्रत- अधीक्षक अभियंता, यवतमाळ सिंचन मंडळ, यवतमाळ यांना माहितीसाठी व त्वरीत कार्यवाहीसाठी रवाना.

प्रत- कार्यकारी अभियंता, यवतमाळ पाटबंधारे विभाग, यवतमाळ यांना माहिती व त्वरीत कार्यवाहीसाठी रवाना.

प्रत- कार्यकारी अभियंता, धरण सुरक्षा विभाग क्र.२, नाशिक यांना माहिती व कार्यवाहीसाठी रवाना.

प्रत- उपविभागीय अभियंता, पाटबंधारे उपविभाग क्र.२, यवतमाळ यांना माहिती व त्वरीत कार्यवाहीसाठी रवाना.

Chandrabhaga Dam Dist. Amravati