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सत्यमेव जयते

Government of Maharashtra
Water Resources Department
Annual Dam Health Status Report
2021-22
(North Maharashtra Region)

CHANKAPUR DAM

Superintending Engineer
Dam Safety Organisation
Nashik

Chief Engineer
Hydrology & Dam Safety
Nashik

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

Superintending Engineer
Dam Safety Organisation
Dindori Road, Nashik-422004.
Phone (Off.): 0253 – 2530030.
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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) २०२१-२२/९३७२/२०२२ दिनांक : १९ /१०/२०२२

ई-मेल व्दारे

प्रति,

मा. कार्यकारी संचालक,
गोदावरी मराठवाडा विकास महामंडळ,
सिंचन भवन, जालना रोड,
आकाशवाणी केंद्राच्या बाजूला,
औरंगाबाद-४३१००५

मा.कार्यकारी संचालक,
तापी पाटबंधारे विकास महामंडळ,
जळगांव

विषय :- धरण स्थिती अहवाल २०२१-२२ (उत्तर महाराष्ट्र प्रदेश)

संदर्भ :- १) शासन, पाटबंधारे विभागाचे पत्र क्र .पा .वि.१०७७ / २४०२/ १८६७/२ दिनांक- १९/०१/१९८२
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 उत्तर महाराष्ट्र प्रदेशातील पर्जन्य पूर्व व पर्जन्य उत्तर २०२१-२२ 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 प्रकाशित करण्यात आलेला आहे.

मा. महासंचालक, संप्रजसंवसु, मेरी, नाशिक यांचे निर्देशानुसार

१) उपरोक्त प्रकाशीत धरण स्थिती अहवालातील प्रस्तावनेच्या अनुषंगाने मुद्येनिहाय 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) *उत्तर महाराष्ट्र प्रदेशाचा एकत्रित धरणस्थिती अहवाल - २०२१-२२ चे अवलोकन केले असतां वर्ग 1 च्या 07 धरणांचा व वर्ग-२ च्या 11 धरणांचा पर्जन्य पूर्व २०२२ धरण निरिक्षण अहवाल प्राप्त झालेला नाही, तसेच वर्ग 1 च्या 06 धरणांचा व वर्ग-२ च्या 16 धरणांचा पर्जन्य उत्तर धरण निरिक्षण अहवाल प्राप्त झालेला नाही.*

७) *मा. महासंचालक मेरी, नाशिक यांचे वर्ग-१ व वर्ग-२ धरणांचे पर्जन्य पुर्व व उत्तर तपासणी अहवालासोबत धरणांवरील विशेष त्रुटीबाबतचे प्रपत्र (संदर्भ परिच्छेद क्र. १.११) तांत्रिक परिपत्रक जा. क्र. सं.प्र.ज.सं व सु/म 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 पुणे विभागाचा एकत्रित धरणस्थिती अहवाल वेळेत प्रकाशित करणे सोयीचे होईल.*

हे आपले माहितीस्तव व पुढील कार्यवाहीसाठी सादर.

सहपत्र : धरण स्थिती अहवाल २०२१ -२२ (उत्तर महाराष्ट्र प्रदेश)

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

प्रत -

१) मा. सचिव (जसंव्य व लाक्षेवि), जलसंपदा विभाग, मंत्रालय, मुंबई-३२ यांना अहवालासह माहितीस्तव सादर.
२) मा. महासंचालक, संकल्पन, प्रशिक्षण, जलविज्ञान, संशोधन व सुरक्षितता, मेरी, नासिक यांना अहवालासह माहितीस्तव सादर
३) मा. मुख्य अभियंता, जलविज्ञान, व धरण सुरक्षितता, जलविज्ञान भवन,दिंडोरी रोड, नाशिक
४) मा. मुख्य अभियंता,(यांत्रिकी) त्र्यंबक रोड, नाशिक,
५) मा. मुख्य अभियंता, उत्तर महाराष्ट्र प्रदेश, जलसंपदा विभाग, सिंचन भवन, त्र्यंबक रोड, नाशिक
६) मा. मुख्य अभियंता,तापी पाटबंधारे विकास महामंडळ, आकाशवाणी केंद्र, , जळगांव ४२५००१
७) मा. आयुक्त, मालेगांव महानगरपालिका, मालेगांव
८) मा. आयुक्त, नाशिक महानगरपालिका, नाशिक
९) मा. आयुक्त, धुळे महानगरपालिका, धुळे
यांना अहवालासह माहितीसाठी सादर
सहपत्र: अहवालाची प्रत्येकी एक प्रत.

१) उपसचिव (सिंचन व्यवस्थापन), जलसंपदा विभाग, मंत्रालय, मुंबई ३२
२) अधीक्षक अभियंता,(धरण) मध्यवर्ती संकल्पचित्र संघटना, नाशिक.
३)अधीक्षक अभियंता,(दरवाजे) मध्यवर्ती संकल्पचित्र संघटना, नाशिक.
४)अधीक्षक अभियंता, (यांत्रिकी) (द्वार निरीक्षण समन्वय अधिकारी) यांत्रिकी मंडळ, नाशिक.
५)अधीक्षक अभियंता, (यांत्रिकी) यांत्रिकी मंडळ, पुणे.
६) अधीक्षक अभियंता व प्रशासक लाभक्षेत्र विकास प्राधिकरण, सिंचन भवन, नाशिक.
७) अधीक्षक अभियंता व प्रशासक, लाभक्षेत्र विकास प्राधिकरण, अहमदनगर.
८) अधीक्षक अभियंता व प्रशासक, लाभक्षेत्र विकास प्राधिकरण, जळगांव.
९) अधीक्षक अभियंता, जळगांव पाटबंधारे प्रकल्प मंडळ, जळगांव
१०) अधीक्षक अभियंता, धुळे पाटबंधारे प्रकल्प मंडळ, सिंचन भवन, धुळे

११) अधीक्षक अभियंता,महाराष्ट्र जीवन प्राधिकरण मंडळ,होलाराम कॉलनी,साधू वासवानी रोड, नाशिक २.

१२)अधीक्षक अभियंता, महाराष्ट्र औद्योगिक विकास महामंडळ,उद्योग भवन, आय टीआय सर्कल जवळ, नाशिक

१३) मुख्याधिकारी, नांदगांव नगर परिषद, नांदगांव

१४) मुख्याधिकारी, मनमाड, नगर परिषद, मनमाड.

१५) मुख्याधिकारी, इगतपुरी, नगर परिषद, इगतपुरी.

यांचे माहितीसाठी व पुढील योग्य त्या कार्यवाहीसाठी अहवालासह सस्नेह अग्रेषित

सहपत्र: अहवालाची प्रत्येकी एक प्रत.

२/- कृपया वरील अहवालाची प्रत मिळाल्याची पोहोच या कार्यालयास पाठवावी ही विनंती.

प्रत -

१) कार्यकारी अभियंता, नाशिक पाटबंधारे विभाग, सिंचन भवन शेजारी, त्र्यंबकरोड, नाशिक.

२) कार्यकारी अभियंता, नांदुरमध्यमेश्वर प्रकल्प विभाग, नाशिक.

३) कार्यकारी अभियंता, पालखेड पाटबंधारे विभाग, नाशिक.

४) कार्यकारी अभियंता, कडवा प्रकल्प विभाग, नाशिक.

५) कार्यकारी अभियंता, मध्यम प्रकल्प विभाग, नाशिक.

६) कार्यकारी अभियंता, अहमदनगर पाटबंधारे विभाग, अहमदनगर.

७) कार्यकारी अभियंता, मुळा पाटबंधारे विभाग, अहमदनगर.

८) कार्यकारी अभियंता, मालेगांव पाटबंधारे विभाग, गौती बंगला, मालेगांव कॅम्प, मालेगांव जि. नाशिक

९) कार्यकारी अभियंता, धुळे पाटबंधारे विभाग, सिंचन भवन, साक्री रोड, धुळे.

१०) कार्यकारी अभियंता, लघु पाटबंधारे विभाग, सिंचन भवन, साक्री रोड, धुळे.

११) कार्यकारी अभियंता, जळगांव पाटबंधारे विभाग, जळगांव.

१२) कार्यकारी अभियंता, लघु पाटबंधारे विभाग, जळगांव.

१३) कार्यकारी अभियंता, गिरणा पाटबंधारे विभाग, जळगांव.

१४) कार्यकारी अभियंता, जळगांव मध्यम प्रकल्प विभाग, जळगांव.

१५) कार्यकारी अभियंता, उर्ध्व प्रवरा धरण विभाग, संगमनेर, जि. अहमदनगर.

१६) कार्यकारी अभियंता,गिरणा नदी खोरे प्रकल्प विभाग, नाशिक.

१७) कार्यकारी अभियंता, नंदुरबार मध्यम प्रकल्प विभाग क्र.२, नंदुरबार ,जि. नंदुरबार.

१८) कार्यकारी अभियंता, महाराष्ट्र औद्यागिक विकास महामंडळ, धुळे.

१९) कार्यकारी अभियंता, महाराष्ट्र जीवन प्राधिकरण, होलाराम कॉलनी, साधु वासवानी रोड, नाशिक.

दोष व त्रुटी बद्दल त्वरीत कार्यवाही करुन अनुपालन / पुर्तता अहवाल या कार्यालयास त्वरित पाठवावा ही विनंती.

२/- सदर अहवालाची प्रत ई मेले द्वारे पाठविण्यात येत आहे. तथापि सदर अहवालाची प्रत संबंधित मंडळ कार्यालयाकडून प्राप्त करुन घ्यावी ही विनंती.

प्रत - कार्यकारी अभियंता, धरण सुरक्षा विभाग क्र. १/२, कालवा सुरक्षा विभाग,दिंडोरी रोड, नाशिक ४

प्रत- संशोधन अधिकारी, उपकरणे संशोधन विभाग, धरण सुरक्षितता संघटना, नाशिक ४ यांना माहितीसाठी अग्रेषित.

सहपत्र :- प्रत्येकी अहवालाची एक प्रत.

प्रत- ग्रंथालय, धरण सुरक्षा विभाग क्र. ३, नाशिक

सहपत्र :- अहवालाच्या दोन प्रती

प्रत - ग्रंथालय, मध्यवर्ती संकल्पचित्र संघटना, नाशिक

सहपत्र :- अहवालाची एक प्रत.

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Dam Safety Organisation
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Phone (Off.): 0253 – 2530030.
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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) २०२१-२२/9369/२०२२ दिनांक : 9९/90/२०२२

ई-मेल व्दारे

प्रति,
मा.कार्यकारी संचालक
महाराष्ट्र कृष्णा नदी खोरे महामंडळ,
पुणे

विषय :- धरण स्थिती अहवाल २०२१-२२ (उत्तर महाराष्ट्र प्रदेश)

संदर्भ :- १) शासन, पाटबंधारे विभागाचे पत्र क्र .पा .वि.१०७७ / २४०२/ १८६७/२ दिनांक- १९/०१/१९८२
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 उत्तर महाराष्ट्र प्रदेशातील पर्जन्य पूर्व व पर्जन्य उत्तर २०२१-२२ 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 प्रकाशित करण्यात आलेला आहे.

मा. महासंचालक, संप्रजसंवसु, मेरी, नाशिक यांचे निर्देशानुसार

१) उपरोक्त प्रकाशीत धरण स्थिती अहवालातील प्रस्तावनेच्या अनुषंगाने मुद्येनिहाय 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) उत्तर महाराष्ट्र प्रदेशाचा एकत्रित धरणस्थिती अहवाल - २०२१-२२ चे अवलोकन केले असतां वर्ग 1 च्या 07 धरणांचा व वर्ग-२ च्या 11 धरणांचा पर्जन्य पूर्व २०२२ धरण निरिक्षण अहवाल प्राप्त झालेला नाही, तसेच वर्ग 1 च्या 06 धरणांचा व वर्ग-२ च्या 16 धरणांचा पर्जन्य उत्तर धरण निरिक्षण अहवाल प्राप्त झालेला नाही.

७) मा. महासंचालक मेरी, नाशिक यांचे वर्ग-१ व वर्ग-२ धरणांचे पर्जन्य पुर्व व उत्तर तपासणी अहवालासोबत धरणांवरील विशेष त्रुटीबाबतचे प्रपत्र (संदर्भ परिच्छेद क्र. १.११) तांत्रिक परिपत्रक जा. क्र. सं.प्र.ज.सं. व सु/म 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 लागु 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 पुणे विभागाचा एकत्रित धरणस्थिती अहवाल वेळेत प्रकाशित करणे सोयीचे होईल.

हे आपले माहितीस्तव व पुढील कार्यवाहीसाठी सादर.

सहपत्र : धरण स्थिती अहवाल २०२१ -२२ (उत्तर महाराष्ट्र प्रदेश)

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

प्रत -

१) मा. सचिव (जसंव्य व लाक्षेवि), जलसंपदा विभाग, मंत्रालय, मुंबई-३२ यांना अहवालासह माहितीस्तव सादर.
२) मा. महासंचालक, संकल्पन, प्रशिक्षण, जलविज्ञान, संशोधन व सुरक्षितता, मेरी, नासिक यांना अहवालासह माहितीस्तव सादर
३) मा. मुख्य अभियंता, विनिर्दिष्ट प्रकल्प , जलसंपदा विभाग, सिंचन भवन, बारणे रोड, पुणे ४११०११
४) मा. मुख्य अभियंता, जलसंपदा विभाग , सिंचन भवन, बारणे रोड, पुणे ४११०११
यांना अहवालासह माहितीसाठी सादर
सहपत्र: अहवालाची प्रत्येकी एक प्रत.

१) अधीक्षक अभियंता व प्रशासक, लाभक्षेत्र विकास प्राधिकरण, अहमदनगर.
२) अधीक्षक अभियंता, कुकडी सिंचन मंडळ, पुणे.
यांचे माहितीसाठी व पुढील योग्य त्या कार्यवाहीसाठी अहवालासह सस्नेह अग्रेषित
सहपत्र: अहवालाची प्रत्येकी एक प्रत.

२/- कृपया वरील अहवालाची प्रत मिळाल्याची पोहोच या कार्यालयास पाठवावी ही विनंती.

प्रत -

१) कार्यकारी अभियंता, अहमदनगर पाटबंधारे विभाग, अहमदनगर.
२) कार्यकारी अभियंता,कुकडी प्रकल्प विभाग क्र. १ नारायणगांव, जि. पुणे.
३) कार्यकारी अभियंता, कुकडी पाटबंधारे विभाग क्र. २, श्रीगोंदा. जि. अहमदनगर.
दोष व त्रुटी बद्दल त्वरीत कार्यवाही करुन अनुपालन / पुर्तता अहवाल या कार्यालयास त्वरित पाठवावा ही विनंती.

२/- सदर अहवालाची प्रत ई मेले द्वारे पाठविण्यात येत आहे. तथापि सदर अहवालाची प्रत संबंधित मंडळ कार्यालयाकडून प्राप्त करुन घ्यावी ही विनंती.

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

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) २०२१-२२/9360/२०२२ दिनांक : 9९ /9८ /२०२२

ई-मेल व्दारे

प्रति,
मा.कार्यकारी संचालक,
कोकण पाटबंधारे विकास महामंडळ,
सिंचन भवन, कोपरी कॉलनी
ठाणे (पूर्व). ४००६०३

विषय :- धरण स्थिती अहवाल २०२१-२२ (उत्तर महाराष्ट्र प्रदेश)

संदर्भ :- १) शासन, पाटबंधारे विभागाचे पत्र क्र .पा .वि.१०७७ / २४०२/ १८६७/२ दिनांक- १९/०१/१९८२
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 उत्तर महाराष्ट्र प्रदेशातील पर्जन्य पूर्व व पर्जन्य उत्तर २०२१-२२ 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 प्रकाशित करण्यात आलेला आहे.

मा. महासंचालक, संप्रजसंवसु, मेरी, नाशिक यांचे निर्देशानुसार

१) उपरोक्त प्रकाशीत धरण स्थिती अहवालातील प्रस्तावनेच्या अनुषंगाने मुद्येनिहाय 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) उत्तर महाराष्ट्र प्रदेशाचा एकत्रित धरणास्थिती अहवाल - २०२१-२२ चे अवलोकन केले असता वर्ग 1 च्या 07 धरणांचा व वर्ग-२ च्या 11 धरणांचा पर्जन्य पूर्व २०२२ धरण निरिक्षण अहवाल प्राप्त झालेला नाही, तसेच वर्ग 1 च्या 06 धरणांचा व वर्ग-२ च्या 16 धरणांचा पर्जन्य उत्तर धरण निरिक्षण अहवाल प्राप्त झालेला नाही.

७) मा. महासंचालक मेरी, नाशिक यांचे वर्ग-१ व वर्ग-२ धरणांचे पर्जन्य पुर्व व उत्तर 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 पुणे विभागाचा एकत्रित धरणस्थिती अहवाल वेळेत प्रकाशित करणे सोयीचे होईल.

हे आपले माहितीस्तव व पुढील कार्यवाहीसाठी सादर.

सहपत्र : धरण स्थिती अहवाल २०२१ -२२ (उत्तर महाराष्ट्र प्रदेश)

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

प्रत -

१) मा. सचिव (जसंव्य व लाक्षेवि), जलसंपदा विभाग, मंत्रालय, मुंबई-३२ यांना अहवालासह माहितीस्तव सादर.
२) मा. महासंचालक, संकल्पन, प्रशिक्षण, जलविज्ञान, संशोधन व सुरक्षितता, मेरी, नासिक यांना अहवालासह माहितीस्तव सादर
३) मा. मुख्य अभियंता, जलसंपदा विभाग, कोंकण प्रदेश, हाँगकाँग बँक इमारत, फ़ोर्ट, मुंबई ४०००२३.
४) अधीक्षक अभियंता, ठाणे पाटबंधारे मंडळ, ठाणे.

यांचे माहितीसाठी व पुढील योग्य त्या कार्यवाहीसाठी अहवालासह सस्नेह अग्रेषित

सहपत्र: अहवालाची प्रत्येकी एक प्रत.

२/- कृपया वरील अहवालाची प्रत मिळाल्याची पोहोच या कार्यालयास पाठवावी ही विनंती.

प्रत -

१) कार्यकारी अभियंता, लघु पाटबंधारे विभाग, नाशिक.

दोष व त्रुटी बद्दल त्वरीत कार्यवाही करुन अनुपालन / पुर्तता अहवाल या कार्यालयास त्वरित पाठवावा ही विनंती.

२/- **सदर अहवालाची प्रत ई मेले द्वारे पाठविण्यात येत आहे. तथापि सदर अहवालाची प्रत संबंधित मंडळ कार्यालयाकडून प्राप्त करुन घ्यावी ही विनंती.**

FOREWORD

1.0 Annual Dam Health Status Report (ADHSR) 2021-22 of Class-I & Class-II Dams in North Maharashtra 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 to 5 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 over overall Health Status Gated Dam in ADHSR- 2021-22 of Mechanical Organisation.

3.0 This report covers Dam Health Status of 69 Class-I & 225 Class-II Dams owned by WRD and Also covers 1 Class-I & 8 Class-II Private Owned Dams inspected by DSO twice in the year.

4.0. There are total 303 Dams in this Region. Out of 606 expected Inspection Reports, this ADHSR is based on 564 Inspection Reports received in DSO, Nashik.

Status of Dam inspection during 2021-22

(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	138	450	588	125	423	548	13	27	40
Private	02	16	18	02	14	16	00	02	02
Total	140	466	606	127	437	564	13	29	42

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	69	221	290	00	08	69	00	39	221
	2021-22	69	225	294	00	09	68	00	33	214
Private	2020-21	01	08	09	00	00	01	00	01	01
	2021-22	01	08	09	00	01	01	00	08	08
Total	2020-21	70	229	299	00	08	70	00	40	229
	2021-22	70	233	303	00	10	69	00	41	222

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	0	0	0	33	154	187	595	855	1450
	2021-22	0	0	0	47	166	213	631	1391	2022
Private	2020-21	0	0	0	00	02	02	00	44	44
	2021-22	0	0	0	01	25	26	10	107	117
Total	2020-21	0	0	0	33	156	189	603	909	1512
	2021-22	0	0	0	48	191	239	641	1498	2139

Gated Dams having deficiencies (Class-I) (As per Mechanical Organization)

(Ref. Table- 8.1)

Dam owner	Year	Number of Gated Dams	No. of dams inspected	No. of dams having deficiencies	Number of Deficiencies		
					Category		
					Category -1	Category -2	Category -3
W.R.D	2020-21	35	34	34	01	357	1896
	2021-22	35	35	35	01	351	1726
Private	2020-21	01	01	01	00	05	07
	2021-22	01	1	1	00	04	--
Total	2020-21	36	35	35	01	662	1903
	2021-22	36	36	36	01	655	1726

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 69 Dams.

7.02 : 47 No. of Category-2 Deficiencies in 9 out of total 69 No. of Dams are noticed.

7.03 : 631 No. of Category-3 Deficiencies in total 69 Dams are noticed.

7.04**:** Out of ATR expected for 33 No. of Category-2 Deficiencies, No field action is noticed for removal of Deficiencies.

Government Owned Class-II Dams :

7.05: Category-1 Deficiency is Not noticed in all 225 Dams.

7.06: 166 No. of Category-2 Deficiencies in 33 out of total 255 No. of Dams are noticed.

7.07: 1391 No. of Category-3 Deficiencies in total 214 Dams are noticed.

7.08: Out of ATR expected for 161 No. of Category-2 Deficiencies, field action for removal of 137 Deficiencies is noticed for 2 Deficiencies only.

Private Owned Class-I Dams :

7.09: Category-1 Deficiency is Not noticed in any Dam.

7.10 : 01 No. of Category-2 Deficiencies in 01 Dams are noticed.

7.11 : 10 No. of Category-3 Deficiencies in total 01 Dams 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 any Dams.

7.14 : 25 No. of Category-2 Deficiencies in total 8 Dams are noticed.

7.15 : 107 No. of Category-3 Deficiencies in total 8 Dams are noticed.

7.16 **:** Out of ATR expected for 02 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 30thJune & Post Monsoon Inspection Report must be submitted to DSO, Nashik by 31stDecember 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 54 (9.03 %) Pre & Post Monsoon Reports out of 588 Pre & Post Monsoon Reports are received in stipulated period.

494 (84.01 %) Pre & Post Monsoon Reports are received out of 588 Pre & Post Monsoon Reports after rigorous follow up by DSO officials & 40 (6.80 %) reports out of 588 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 48 No. of Dams (196 Cat-2 Deficiencies). However ATR was not received from 17 no. dam i.e. only 36% for 31 no. of dam (103 Cat -2 Deficiencies) 64.58 % 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 33 No. of Category-2 Deficiencies, No Action Taken Report (ATR) from field for removal of Deficiencies.

8.08: Earthen dam uprooting of trees & shrubs grown on embankment of Dam follow CWC guidelines for safety of dams 2018.

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.

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

8.12: Executive Director, Godavari Marathwada Development Corporation, Aurangabad 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: As per Marathi Government Resolution Misc. 2016/(88/16)/IM(W) Dtd.- 09/05/2016, Responsibility of Approval of M & R Work's Procurement List & Prioritization of execution of work & its implementation is entrusted to Superintending Engineers. And Responsibility of Review & monitoring is entrusted to Chief Engineers.

8.14: 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.

8.15: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.

8.16: 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.

8.17The 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. Till no such type of reports are received in DSO, Nashik

8.18: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. NRLD is last updated in 2019.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, regarding this no information is submitted to DSO Nashik.

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: 11/10/2022

-Sd-
(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 Nagpur 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.

North Maharashtra Region comprising 454 Government owned Completed Dams (includes 08 Century old Dams & 34 Dams under Construction Dams) & 9 private Dams

DSO, Nashik monitors all Government Dams from safety point of view. In addition to this DSO, Nashik carried out detailed inspections of 9 Private Dams.1 Class I Dam from Commissioner, Nashik Municipal Corporaton,Nashik, 2 Class II Dams from S.E. MJP Nashik, 1 Class II dam from Malegaon Municipal Corporatin, Malegaon, 1 Class II dam from Dhule Municipal Corporation, Dhule, 1 Class II dam from E.E. M.I.D.C. Dhule, 1 Class II dam from Igatpuri Municipal Council Igatpuri, 1 Classa II dam from Manmad Nagar Parishad, Manmad, 1 Class II dam from Nandgaon Nagar Parishad, Nandgaon.

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

District	No. Of Class- I Dams	No. Of Class- II Dams	No. Of Class- III Dams	Grand Total
NASHIK	24	89	20	**132**
AHMEDNAGAR	13	34	36	**81**
DHULE	10	32	14	**56**
NANDURBAR	08	36	05	**49**
JALGAON	14	34	76	**124**
Govt. Total	**69**	**225**	**151**	**442**
NASHIK	01	06	-	**07**
DHULE	00	02	-	**02**
Private Total	**01**	**08**	**00**	**09**
Grand total	**70**	**233**	**151**	**454**

1.04 Time Schedule of Inspections :

The Government of Maharashtra has designed systematic approach formonitoring 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" irrespectiveother 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)"

1.06Field 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. 28/08/2002as 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

1.09.2Category-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.	1 M.4

1.09.3 Category-2Standard Deficiencies :

Deficiency Cat II (A)	Deficiency Cat II (B)
Earthen Dam	
A.1: Boil/leakage/ seepage/ wet patches/ slushiness 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-3Standard 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	Minorleaching in the gallery/ body of dam.	3.12
13	V – notches/ measuring devices are not in working condition/ silted /damaged/ not provided.	3.13
14	Mosquito net door is to be provided to avoid entry of reptiles in thegallery.	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,	3.19

Sr. No.	Deficiencies	Category identifier
	standingWater in EDA / Tail channel.	
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 well.	3.32
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 21/07/202 (सं.प्रा.ज.सं.सु./म.अ.सं.सं./प्रशा/अधि/८८/सन२०२०) 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 Updatedcontact 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 rigorousfollow 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 (ATR)

2.1 General:

Annual Dam Health Status Reports (ADHSR) of Dams for Year 2020-2021 was published by Director General, DTHRS, MERI, Nashik in May 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 is Government owned 69 Class-I & 222 Class-II Dams & Private owned 9 Class-I & 2 Class-II Dams

As per ADHSR 2020-21 Action Taken Report was expected from Government owned 8 Class-I & 39 Class-II Dams & Private owned 1 Class-II Dam. However Action Taken Report were received from Government owned 3 Class-I & 28 Class-II Dams & Private owned dams Nil action taken reports received. [Ref. Table 2.1, 2.2& 2.3]

2.3 Action Taken Report of Class-I & Class-II Dams (Government 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	8	33	39	161	3	11	22	97	0	0	28	19	28	19	0	0	22	5	22	5
4	Private	0	0	1	2	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0
	Total	8	33	40	163	3	11	23	99	0	0	28	19	28	19	0	0	22	5	22	5

2.4 Conclusions :

As 48 out of 16 ATR are 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 Inspection Report in DSO	Received in time in DSO		Even after rigorous follow up by DSO		ATR were not received	
		Number	%	Number	%	Number	%
1	48	0	0.00	31	59.95	16	34.03

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 exercise 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 exercise 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 North Maharashtra Region ,Nashik																															
1	CADA, Nashik	2	7	8	30	10	37	0	0	4	4	4	4	0	0	0	0	0	0	0	0	4	10	4	10	2	7	4	16	6	23
2	CADA, Ahamad nagar	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total (A)		**2**	**7**	**8**	**30**	**10**	**37**	**0**	**0**	**4**	**4**	4	4	0	0	0	0	0	0	**0**	**0**	**4**	**10**	**4**	**10**	**2**	**7**	**4**	**16**	**6**	**23**
[B] Chief Engineer, TIDC, Jalgaon																															
1	CADA, Jalgaon	3	11	22	97	25	108	0	0	22	12	22	12	0	0	22	5	22	5	3	11	22	78	25	89	0	0	0	2	0	2
2	DIPC, Dhule	1	5	0	0	1	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	5	0	0	1	5
3	JIPC, Jalgaon	2	10	4	11	6	21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	10	4	11	6	21
Total (B)		**6**	**26**	**26**	**108**	**32**	**134**	**0**	**0**	**22**	**12**	**22**	**12**	**0**	**0**	**22**	**5**	**22**	**5**	**3**	**11**	**22**	**78**	**25**	**89**	**3**	**15**	**4**	**13**	**7**	**28**

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
[C] Chief Engineer, Kokan Region , Mumbai																															
1	TIC, Thane	0	0	2	7	2	7	0	0	2	3	2	3	0	0	0	0	0	0	0	0	2	4	2	4	0	0	0	0	0	0
Total (C)		**0**	**0**	**2**	**7**	**2**	**7**	**0**	**0**	**2**	**3**	**2**	**3**	0	0	0	0	0	0	0	0	**2**	**4**	**2**	**4**	**0**	**0**	**0**	**0**	**0**	**0**
[D] Chief Engineer, (SP),Pune																															
1	Kukadi IC, Pune	0	0	3	16	3	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	16	3	16
Total (D)		0	0	3	16	3	16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	3	16	3	16
Government Total (A+B+C+D)		**8**	**33**	**39**	**161**	**47**	**194**	**0**	**0**	**28**	**19**	**28**	**19**	**0**	**0**	**22**	**5**	**22**	**5**	**3**	**11**	**28**	**92**	**31**	**103**	**5**	**22**	**11**	**45**	**16**	**67**

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
Private																															
1	NMC, Nashik	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	0	0	0	0	0	0
2	MMC , Malegaon	0	0	0	0	0	0	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	MJP, Nashik	0	0	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	**0**	**0**	0	0	1	2	1	2
	Private Total	0	0	1	2	1	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	2	1	2
	Grand Total	**8**	**33**	**40**	**163**	**48**	**196**	**0**	**0**	**28**	**19**	**28**	**19**	**0**	**0**	**22**	**5**	**22**	**5**	**3**	**11**	**28**	**92**	**31**	**103**	**5**	**22**	**12**	**47**	**17**	**69**

Table - 2.3

Dams for which Compliance Report Not Received in DSO, Nashik

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 North Maharashtra Region ,Nashik					
I) Superintending Engineer North Maharashtra Region ,Nashik					
1) Executive Engineer, Nashik Irrigation Division, Nashik					
1.	Bhandardara	01	1	Mahiravani	02
			2	Borkhind	
2)Executive Engineer, Ahamdanagar Irrigation Division, Ahamdanagar					
			1	Ambit	02
			2	Ambikhalsa	
3)Executive Engineer, Mula Irrigation Division Ahamdanagar					
1	Mula	01			

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**	
B)Chief Engineer Tapi Irrigation Project, Jalgaon					
I) Superintending Engineer DIPC, Dhule					
1)Executive Engineer Girna River Valley Project Division, Nashik					
1	Punand	01			
II) Superintending Engineer JIPC, Jalgaon					
1) Executive Engineer,Minor Irrigation Division, Jalgaon					
			1	Gangapuri	04
			2	Sur	
			3	Matran Nalla	
			4	Jondalkheda	
2) Executive Engineer,Jalgaon Medium Project Division no 1 , Jalgaon					
1	Gul	02			
2	Anjani				

D)Chief Engineer Special Project, Pune					
I) Superintending Engineer Kukadi Irrigation Division,Kukadi					
1) Executive Engineer, Kukadi Irrigation Division, Shrigonda					
		------	1	Telenghashi	3
			2	Visapur	
			3	Naigaon	
Private Dam					
1) Maharashtra Jeevan Vikas Pradhikaran, Water Management Circle, Nashik					
		---	1	Talegaon	1
Total		**05**	**Total**		**12**

Table 2.4

ATR on Category-1 Deficiency in Class-I 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
---------- No Such Dams under this category is reported ----------						

Table 2.5

ATR on Category-2 Deficiency in Class-I Dams

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6		7
[A] CHIEF ENGINEER, NMR, NASHIK							
S.E. Administrator CADA Nashik							
(a) AHMEDNAGAR IRRIGATION DIVISION,AHMEDNAGAR							
1	Name-**BHANDARDARA** Year of Completion: **1926** Location Longitude: **73° 45 30** Latitude: **19° 32 43** Height: **82.35 m** Gross capacity: **312.60Mm³** Spillway capacity: **1500 m³/sec** Sr. No. in National Register of Large Dams :- **MH09HH0047**	23/05/2020 12/12/2020 **04/07/2020**	Smt. A.H.Ahirrao S.E. & Adm. CADA Nashik **Shri. Y.K.Bhadane S.E. DSO. Nashik**	Masonry Dam	Leaching is observed at some location. .**(A11)**	Leaching material should be tested from MERI.	**Not Received**
					There is excessive seepage sweating on d/s face of the dam at ch. 935 ft, 1090 ft. 1140 ft,&1265 ft.**(A11)**	Causes of leakage should be found out & necessary repairs should be carried out.	
					Quantity of seepage not measured & recorded daily or periodically.	Quantum of seepage shall be monitored monolithwise. Leaching material getting accumulated to be scraped off frequently. Leached material to be collected yearly monolithwise and weighed and record of quantity and weight to be maintained. Leaching material to be tested from MERI, Nasik.	
					Piezometer, inverted plunb bob & uplift pressure measuring gauge are out of order.	Urgent repairing should be carried out with the help of Instrumentation Division.	

(d) MULA IRRIGATION DIVISION,AHEMADNAGAR							
Sr. No.	**Dam Features**	**Date of inspection**	**Inspecting Officer**	**Main component of dam**	**Observations / Significant deficiencies noticed.**	**Remedial Measures Suggested**	**Implementation Status**
1	**2**	**3**	**4**	**5**	**6**		**7**
d) MULA IRRIGATION DIVISION,AHEMADNAGAR							
2	Name:- **MULA** Year of Completion: **1971** Location Longitude: **74° 34 30** Latitude: **19° 21 30** Height: **46.67 m** Gross capacity: **736.32 Mm³** Spillway capacity:- **5946.53 m³/sec** Sr. No. in National Register of Large Dams :- **MH09HH0316**	13/05/2020 Not Received	Smt. A.H.Ahirrao S.E. & Adm. CADA Nashik	Earth dam	There is sign of water logging slushy condition on d/s of dam. **(A2)**	The d/s area at least up to above 200m. From toe, shall be free from stagnation of water. The area should be well drained so as to avoid any stagnant pools of water	In old Mula river d/s if Mula dam at ch 2200m there is K.T. weir digras. Hence, water logging and slushy condition is occurred. each year cleaning of old river at d/s side of mula dam is done. (**Letter no.MID/PB-5/ 1613 dt 22/04/2022)**
				Body Wall	Considerable leaching from seepage water and deposition of lime near seepage is observed. **(A12)**	Proper remedial measures should be taken in consultation with MERI, Nashik	Not yet done
				Spillway gates	Life is overdue for full length of the chain or wire rope of the hoist.**(A18)**	Necessary repairs should be carried out.	

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6		7
[B] CHIEF ENGINEER, TAPI IRRIGATION DEVELOPMENT CORPORATION, JALGAON							
1)SE CADA JALGAON							
(a)EXECUTIVE ENGINEER, DHULE IRRIGATION DIVISION,DHULE							
3	Name :- **RANIPUR** Year of Completion: **1999** Location Longitude: **NA** Latitude: **Na** Height: **40 m** Gross capacity: 43.90 **Mm³** Spillway capacity: **Ungated** Sr. No. in National Register of Large Dams:- **MH09HH1481**	29/05/2020 15/01/2021	Shri. S.N.Kulkarni SE & Adm. CADA Jalgaon	W.W&T.C	Waste weir bar needs to be arrested by provision of concrete structure wall.**(B7)**	Necessary repairs should be carried out.	Preparation of estimate at sub division level is in process.
				Outlet	Conduit is fully chocked by incident of 2006.**(B5)**	Siltation should be removed from conduit for free flow of water.	
					Conduit gets chocked by debris. Gate system cannot be Operated.**(B5)**		
4	Name :- **SARANGKHEDA BARRAGE** Year of Completion: **2008** Location Longitude: **74°32□ 15□□** Latitude: **21°25□ 30□□** Height: **13.34 m.** Gross capacity: **92.20 Mm³** Spillway capacity:- **50529.00 m³/sec** Sr. No. in National Register of Large Dams :- **MH09HH1770**	18/03/2020 02/01/2021	Shri. S.N. Kulkarni SE,&Admn. CADA Jalgaon	Spillway	`Vertical lift gates highly deteriorated. Gates are in poor condition. (B11)	Necessary action of repairing / replacement should be taken with the help of Mechanical Organisation.	For this on 06/03/2022 at TIDC, Jalgaon committe is established and conclusion and recommedation of committee is send to goverment level.
				Hydro Mechainc Componant.	Due to back water of Prakasha Barrage, D/S side of vertical gates were submerged upto 1.2 m. Hence corrosion found in all gates. Bottom panel of gates needs to be replaced.	Necessary repairs / replacement should be carried out with the help of Mechanical Organisation.	

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6		7
(b) EXECUTIVE ENGINEER,GIRNA IRRIGATION DIVISION, JALGAON							
5	Name :- **MANYAD (JALGAON)**Year of Completion: **1973**Location Longitude: **74° 48 00"** Latitude: **20° 29 00** Height: **45.00 m** Gross capacity: **53.98Mm³** Spillwaycapacity: **3755 m³/sec** Sr. No. in National Register of Large Dams:- **MH09HH0387**	14/05/2020 03/12/2019	Shri. S.N.Kulkarni SE & Adm. CADA Jalgaon	W.W. Bar & tail channel	Foundation erosion in Guide/Divide /Junction, Need to repairs Immediately **(A16)**	Necessary repairs should be carried out..	SE,CDO Nashik letter no manyad/236 dt 28/11/2014 the work repaired included in estimate has damaged more due to heavy rainfall in september month, because of this the work pattern is changed and for this estimation preparation is progressed at sub division level.
				EDA	Erosion occurred in both wall No.1 & 2 in tail channel**.(A16)**	Necessary repairs should be carried out.	
					Erosion on D/S in both E.D.A. & wall No.1 **(A14)**	Necessary repairs should be carried out.	
					Protection wall No.5 collapsed between Ch. 55 ti 125 m.	Necessary repairs should be carried out.	
					Appron is also washed away Need to repaire immediately**(A14)**	Proper measures to control the erosion should be carried out. Appron should be reconstructed with consultation of CDO Nashik	
					Scouring is noticed between EDA & check wall No.1	Necessary repairs shpuld be carried out.	

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial Measures Suggested	Implement ation Status
1	2	3	4	5	6		7
(2) S.E.JALGAON IRRIGATION PROJECT CIRCLE, JALGAON							
(a) EXECUTIVE ENGINEER,JALGAON MEDIUM PROJECT DIVISION No.1,JALGAON							
6	Name **:- GUL** Year of Completion: **2009** Location Longitude: **75° 22 40** Latitude: **21° 19 00** Height: **31.33 m** Gross capacity: **23.25 Mm³** Spillway capacity:- **1823.00 m³/sec** Sr. No. in National Register of Large Dams :- **MH09MH1955**	08/05/2020 Not Received	Shri. A.S.More S.E. J.I.P.C. Jalgaon	Earthen dam	Wet/ slushy patches observed in Gorge portion from Ch. 635m to 655m**. (A1)**	Necessary measures should be carried out.	**Not Received**
					In Inspection gallery lighting should be done. **(A8**	Necessary measures should be carried out.	
					Stairs are slippery needs to be cleaned.**(A8)**	Necessary measures should be carried out.	
					Excessive leakages at Rd. 72m. due to monolethic joint & from porous drain. It should be rectify.**(A10)**	Necessary measures should be carried out.	
					Seepages at 3 to 4 locations needs to be repaired. **(A10)**	Necessary measures should be carried out.	
					Stand by Generator needs to be repaired.**(A19)**	Necessary repairs should be carried out.	
					Leakages to the intake well of right bank H.R.& conduit concrete from Ch. 251.15 m. to 253.20 m**.**	Necessary repairs should be carried out	

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6	7	8
7	Name- **Anjani** Year of Completion: 2007 Location Longitude: 75o 19□ 00□□ Latitude: 20o 54□ 00□□ Height: 23.20 m Gross capacity: 36.78 Mm3 Spillway capacity: 1991.81 m3/sec Sr. No. in National Register of Large Dams :-MH09MH1954	29/04/2020 Not Received 03/06/2020	Shri. A.S.More S.E. JIPC. Jalgaon Shri. Y.K.Bhadane S.E. DSO. Nashik	Hydro Mechanic Component	Gate No. 2 is in non operative condition &Goliath crane & trunnion buckle of gate No.2 is broken. (A18)	Necessary repairs should be carried out with the help og Mechanical Organisation.	**Not Received**
					Rubber seal & wire ropes of all three Gates need to be replaced. (B12 & A18)	Necessary repairs should be carried out with the help og Mechanical Organisation.	
					Standby Generator is needed. (A19)	Necessary action should be taken.	
					Lifting arrangement is not provided for emergency gates. (B5)	Necessary action should be taken.	

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6		7
(2) S.E.DHULE IRRIGATION PROJECT CIRCLE,DHULE							
(a) EXECUTIVE ENGINEER, GIRNA RIVER VALLEY PROJECT DIVISION,NASHIK							
8	Name :-**PUNAND** Year of Completion: **2011** Location Longitude: **73° 52 30** Latitude: **20° 37 30** Height: **42.225 m** Gross capacity: **39.75 Mm³** Spillway capacity:- **1985.00 m³/sec** Sr. No. in National Register of Large Dams :- **MH09MH1820**	22/05/2020 28/12/2020	Shri. M.S.Amale SE,DIPC, Dhule Shri. Rahul Patil, EE,GRVPD, Nashik	Foundations	Drainage gallery is full of water**.** Lighting arrangement done but required to be repaired**.(A10)**	Grouting is necessary for OF & NOF section. Also behaviour of gallery should be kept under observation	**Not Received**
				D/S Drainage	Due to rock erosion, pond developed at D/S of apron as per suggested by CDO cement concrete Up to Ch. 57.85 m.is in progress)**(A16)**	Necessary repairs should be carried out.	
				EDA	Due to rock erosion, pond developed near D/S of apron near R/S guide wall (Ch. 58.85 m. to 75 m. D/S side**) (A16)**	Necessary repairs should be carried out	
				River Sluice	Rock erosion found near D/S of apron of spillway. **(A16)**	Necessary measures should be carried out.	
				Spillway Gates	**Full length of chain or wire rope of the hoist is not in sound condition. (3.20)**	Necessary repairs should be carried out in consultation with Mechanical Organisation.	

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
---------- No Such Dams under this category is reported ----------						

Table 2.7

ATR on Category-2 Deficiency in Class-II Dams

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6		7
[A] CHIEF ENGINEER NMR , NASHIK **(1) SUPERINTENDING ENGINEER & ADMINISTRATOR C.A.D.A. NASHIK** **(a) EXECUTIVE ENGINEER, NASHIK IRRIGATION DIVISION, NASHIK**							
1	Name: **BORKHIND** Year of Completion:**1995** Location: Longitude: **73°50 00** Latitude: 19°**45 09** Height: **19.59 m** Gross capacity:**1.576 Mm³** Spillway capacity: **7.62 cumecs** Sr.No.in National Register of Large Dams:-**MH09MH1347**	22/04/2020 12/12/2020	Shri. S.D. Shinde E.E. N.I.D. Nashik & Shri. S.D. Shinde E.E. N.I.D. Nashik	Earthen Embankment	Top width, U/S & D/S slopes are not as per Design, Some concavity is noticed. **(B3)**	Causes of leakage should be investigated & treated accordingly.	**Not Received**
				WW & TC	Outlet gate is in closed position since last 5 years. **(B5)**	The repair shall be carried out with the help of Mechanical Organization	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
2	Name:**MAHIRAWANI** Year of Completion:**1984** Location: Longitude: **73° 39 00** Latitude: **19° 57 00** Height: **25.53 m** Gross capacity: **2.633 Mm³** Spillway capacity: **196 cumecs** Sr.No.in National Register of Large Dams:-**MH09MH0683**	01/06/2020 07/12/2020 02/12/2020	Shri. S.D. Shinde E.E. N.I.D. Nashik & Shri. S.D. Shinde E.E. N.I.D. Nashik Shri. C.T. Mondhe E.E. DSO,Nashik	Outlet	There is about 2 cusecs leakage through masonary of conduit..(B5)	The leakage may be due to damages or misalignments of stem rods, damages to rubber seal, improper operation of hoist etc. The repair shall be carried out with the help of Mechanical Organization to minimize leakages.All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly.	**Not Received**
					Leakage seen from side wall of conduit & conduit concrete.**(A4)**	Causes of leakage should be investigated & treated accordingly.	
					Seepage observed near and around the junction of conduit. concrete and earthwork. (2 Cusecs) **(A4)**	Causes of seepage should be investigated & treated accordingly	
					WW bar is not in good condition.**(B7)**	Damaged portion of w.w. bar shall be repaired.	
				W.W.&T.C	scouring on D/S side of WW bar (50 m. below) is seen. **(A7)**	Scouring on d/s to be repaired by concrete filling suitably	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
(b) EXECUTIVE ENGINEER, MALEGAON IRRIGATION DIVISION, MALEGAON							
3	Name :- **JAMLEVANI** Year of Completion: 1999 Location : Longitude: 73o 49□ 47 □□ Latitude: 20o 26□ 40 □□ Height: 27.63 m Gross capacity:1.66 Mm3/sec Spillway capacity:- 340.37cumecs Sr.No.in National Register of Large Dams : MH09MH1507	16/05/2020 06/02/2020	Shri.M.S. Chaudhari E.E.M.I.D. Malegaon	Earth Dam.	Crest profile &slope of dam is not as per design.(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	Estimate Preparation is Progress at section office.
					Abnormal leakage through rock toe.(B3)	. Exact causes of leakages should be investigated & treated accordingly.	Disturbed pitching work at rock toe is done in year 20-21.
				Waste weir bar &Tail channel	Junction between spillway bar & embankment is not intact. Leakage observed through masonry wall. (B7)	Exact causes of leakages should be investigated & treated accordingly.	Grouting Estimate Preparation in Progress at section office.
					Scouring is noticed at D/S side in tail channel (A7)	Scouring on d/s to be repaired by concrete filling suitably	Estimate Preparation is Progress at section office.
4	Name:**SHINDE** Year of Completion: 1984 Location: Longitude: :74o18□ 00 □□ Latitude: 20o 21□ 40□□ Height: 21.26 m Gross capacity:1.690 Mm3 Spillway capacity: 80.00 cumecs Sr.No.in National Register of Large Dams: MH09MH0951	16/05/2020 15/12/2020	Shri.M.S. Chaudhari E.E.M.I.D. Malegaon	Outlet	Leakage through conduit is observed.about 100 LPM.(A4)	Leakage should be monitored & if it is large then pipe joints should be repaired & all leakages need to be attended in time. Exact causes of leakages should be investigated & treated accordingly.	Work done by mechanical divisional Nashik.
					Outlet well is notin good condition.(A6)	Necessary repairs to be carried out.	Estimate Preparation is Progress at section office
				Waste weir bar & tail channel.	Leakage through foundation of WW bar.(2 to 3 Cusecs).(B7)	Exact causes of leakages should be investigated & treated accordingly.	Estimate Preparation is Progress at section office
					Scouring on D/S of ww bar.(A7)	Scouring on d/s to be repaired by concrete filling suitably	Work is kept in special repairs year 2020-21.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
5	Name:**BHADANE** Year of Completion: 1984 Location: Longitude: 73o 30 00 Latitude: 20o 34 00 Height: 16.20 m Gross capacity:1.520 Mm3 Spillway capacity: 101.0cumecs Sr.No.in National Register of Large Dams: MH09MH0957	16/05/2020 15/12/2020	Shri.M.S. Chaudhari E.E.M.I.D Malegaon	EE	Section is not as per design in respect of top width.D/S and U/S slope are not as per design.(B3)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	Estimate Preparation is Progress at section office
				Outlet	Leakage through gate and HR well.(B5 & A6)	Causes of leakages should be investigated & treated accordingly.	Gate repaired by Mechanical unit.
					Leakage through well masonry.(A6)	Exact causes of leakages should be investigated & treated accordingly. All leakages need to be attended in time.	Estimate Preparation is Progress at section office.
				W.W.& T.C.	EDA is not in good condition. (A14)	Necessary repairs should be carried out. .	Estimate Preparation is Progress at section office
					Scouring is noticed at D/S of waste weir bar @ 60 m.	If required concrete filling should be done OR check wall should be constructed.	Estimate Preparation is Progress at section office

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
6	Name :- **TALWADE BHAMER** Year of Completion: 1979 Location : Longitude: 74o 18□ 00 □□ Latitude: 20o 48□ 00 □□ Height: 15.45 m Gross capacity:2.560 Mm3/sec Spillway capacity:-265.33 cumecs Sr.No.in National Register of Large Dams :- MH09MH0776	24/05/2020 19/12/2020 28/09/2020	Shri.M.S. Chaudhari E.E.M.I.D. Malegaon Shri. C.T. Mondhe E.E. DSO, Nashik	Earth Dam	Dam section is not as per design. Top width is less than design(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly	Yet to be carried out.
				Outlet	Outlet gate is not in working condition.(B7)	Necessary repairs should be carried out.	Yet to be carried out.
					Well and approach channel is completely silted.(A6)	Necessary repairs should be carried out.	Yet to be carried out.
					Outlet wel damaged & silted.	Silt should be removed & Necessary repairs should be carried out.	Yet to be carried out.
				WW. Bar & Tail Channel	Right side UCR masonry having length 1.20 m. &width 0.80 m. is broken.	Necessary repairs should be carried out.	Necessary repairs have been done.
(c)EXECUTIVE ENGINEER, A'NAGAR IRRIGATION DIVISION, AHMADNAGAR							
7	Name:-**AMBIT** Year of Completion:- 2003 Location Longitude:73o 47□ 30 □□ Latitude: 19o 36□ 30□□ Height: 24.00m	24/05/2020 26/12/2020	Shri. G.B. Nannor E.E.A.I.D. A'Nagar	W.W.&T.C.	22 pannel of size 7x 5 m are washed away with anchor bar & exposed rock are open in stilling basin.(A14)	The necessary repair shall be carried out in consultation with the S.E. (Dams) C.D.O.Nashik	**Not Received**

	Gross capacity:5.86Mm3 Spillway capacity:952.0 cumecs Sr.No.in National Register of Large Dams:- MH09MH1943				Flow condition of EDA have tendency to draw material.(A14)	Necessary repairs should be carried out inconsultation with S.E. (Dams) C.D.O.Nashik	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6		7
8	Name:-**AMBIKHALSA** Year of Completion:-1975 Location Longitude:74o10□ 00 □□ Latitude: 19o20□ 34□□ Height: 15.32 m Gross capacity:1.74 Mm3 Spillway capacity:193.94 cumecs Sr.No.in National Register of Large Dams:- MH09MH512	16/05/2020 05/12/2020	Shri. G.B. Nannor E.E.A.I.D. A'Nagar	Earthen Embankment	Standing pool of water is noticed in nalla portion.	Causes of leakages should be find out & water in nalla should be drained out.	**Not Received**
				Outlet.	Outlet well is not in good condition.	Necessary repairs should be carried out.	
					Complete gate assembly have to be repaired.	Necessary repairs should be carried out with the help of Mechanical Organisation.	
				General	Severe leakage through dam & COT	Necessary repairs should be carried out with the help of S.E. (Dams) CDO. Nashik	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6		7
[B] CHIEF ENGINEER, KONKAN REGION , MUMBAI (1)SUPERINTENDING ENGINEER , THANE IRRIGATION CIRLE , KALAWA ,THANE (a)EXECUTIVE ENGINEER, MINOR IRRIGATION DIVISION, NASHIK							
09	Name :**Aad** Year of Completion: 1997 Location: Longitude: 73 o 36□□ 00□□ Latitude: 20o10□ 00 □□ Height: 23.80 m Gross capacity: 1.653 Mm3 Spillway capacity:70.07 cumecs Sr.No.in National Register of Large Dams :-MH09MH1419	12/05/2020 26/12/2020	Shri.G.M. Sanghani, EE, MID, Nashik & Shri.V.Y. Sonwane, EE, MID, Nashik	EE	Local depression observed at some places.Section of dam is get disturbed.(B3)	Necessary repairs should be carried out	The work was proposed in procurement plan 2021-22. Now work will be proposed again in procurement plan 2022-23.
					Top width ,slopes are not as per design at some places.(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	
					The leakage is observed near and around the earthwork and head wall in d/s side .(A4)	Causes of leakages should be investigated & treated accordingly. .	A fund of RS 20 lakhs has been sactioned in procurement plan 2021-22 for the work of leakage around head regulator. Estimated for work is in progress.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6		7
10	Name :**INAMBARI** Year of Completion: 1976 Location: Longitude: 73 o 35□ 00 □□ Latitude: 20o 16□ 00 □□ Height: 22.57m Gross capacity: 2.47 Mm3 Spillway capacity:215.20 cumecs Sr.No.in National Register of Large Dams :- MH09MH0563	12/05/2020 26/12/2020	Shri. S.R.Patil, EE, MID, Nashik	Earth Dam	Heavy undulation on dam top is observed.(B3)	Necessary repairs should be carried out	Work is completed under agreement no B-1/3/2020-21.
					Heavy raincuts are noticed in between chainage 50 m to 150 m.(B4)	Necessary repairs should be carried out	
					Heavy leakage through outlet well.	Necessary repairs should be carried out	
					Construction of flank wall on both ends of weir is essential.(A16)	Necessary repairs should be carried out	The repaired work has been approved in procurement plan 2021-22 and the work is planned to be completed before rainy season of 2022.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
[C] CHIEF ENGINEER ,TIDC ,JALGAON							
(1)SUPERINTENDING ENGINEER&ADMINISTRATOR, C.A.D.A., JALGAON **(a)EXECUTIVE ENGINEER , DHULE IRRIGATION DIVISION,DHULE**							
11	Name:**MUKTI** Year of Completion: 1873 Location : Longitude: 74o 53 00 Latitude: 21o 44 00 Height: 21.20m Gross capacity:9.90 Mm3 Spillway capacity:548.0 cumecs Sr.No.in National Register of Large Dams:- MH09MH0009	08/05/2020 17/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Earth Dam	Dam section is under section in gorge. Leakage is noticed on d/s of slope.(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	As per letter TIDC/PB-4/2550 dt 19/05/2022 and work order no 3023 dt 08/07/2022 work is in progress on field.
					Heavy undulations and heavy raincuts are observed.(B3)	Necessary repairs should be carried out.	
					In gorge portion clear water leakages are observed. Standing pool of water on d/s of dam.(A2)	Leakages appearing on d/s shall immediately be treated by providing inverted filters at exit points & the path of leakage from u/s shall be traced out & treated properly i.e. filling with impervious soil blanket or filling on u/s side The d/s area at least up to above 200 m. from toe, shall be free from stagnation of water The area should be well drained.	
				Outlet	Both emergency gates are not in working condition.(B5)	The repair shall be carried out with the help of Mechanical Organization	
				WW & TC	Leakages through waste weir bar noticed.	Necessary repairs be carried out immediately.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
12	Name:**Mahupada** Year of Completion: 1989 Location : Longitude: 74o 25 45” Latitude: 21o 00 05 Height: 16.47m Gross capacity:2.558 Mm3 Spillway capacity:126.95 cumecs Sr.No.in National Register of Large Dams:- MH09MH1948	06/05/2020 02/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Earth dam	D/S Slope are under section.(B3)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	Preparation of estimate at sub division level is in process.
				Outlet	Leakage from outlet gate about 1 to 2 cusecs.(B12)	Causes of leakages should be investigated & treated accordingly.	
					There is leakage from conduit concrete.(A4)	Causes of leakages should be investigated & treated accordingly.	
				WW.&TC	Scouring on d/s side of bar.(A7)	Scouring on d/s to be repaired by concrete filling suitably.	
13	Name**:-KHAPERKHEDA** Year of Completion: 1976 Location : Longitude: 74o 40 12” Latitude: 20o 30 00 Height: 18.30m Gross capacity:2.70 Mm3 Spillway capacity:424.0 cumecs Sr.No.in National Register of Large Dams: MH09MH0581	05/05/2020 01/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Earth Dam	Section is not as per design Slope indicates concavity.(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	As per Government of Maharashtra, WRD GR no 21/04/2022 RS 3.61 CR administrative approve and as per division letter no PB-4/ 4781/2022 dt 27/06/2022 estimate for technical saction is submitted at competent authoirty.
					Leakage or oozing is noticed at d/s slope.(A1)	Causes of leakages should be investigated & treated accordingly.	
					Boils and wet patches noticed at d/s of embankment. Leakage through dyke.(A1)	Causes of leakages should be investigated & treated accordingly	
					Abnormal leakage through rock toe @ two places from dam body & side hill dyke.	Leakage should be monitored. Exact causes of leakages should be investigated & treated accordingly	
				Outlet	Leakage through conduit concrete & pipe joints (A4)	Leakage should be monitored & if it is large then pipe joints should be repaired & all leakages needs to be attended in time. Exact causes of leakages should be investigated & treated accordingly.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
14	Name:-**WAKWAD** Year of Completion: 1977 Location : Longitude: 74o 46 00” Latitude: 21o 07 00 Height: 28. 64m Gross capacity:2.910 Mm3 Spillway capacity:418.0 cumecs Sr.No.in National Register of Large Dams:- MH09MH0633	03/05/2020 24/10/2020	Shri V.R.Darade E.E.D.I.D. Dhule	Earth Dam	Top width, U/S & D/S slope are not as per design.(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	This project is included in drip II and Drip III programe and work will be done.
				Outlet	Leakage through gate from slot about 10-15 LPS.(A4)	The leakage may be due to damages or misalignments of stem rods, damages to rubber seal, improper operation of hoist etc. The repair shall be carried out with the help of Mechanical Organization to minimize leakages.	
				W.W & T C	Left side Flank wall between WW bar & embankment is collapsed.(B7)	It should be reconstructed on top priority.	
					About 20 m. portion of waste weir bar is collapsed. (B7)	Damaged portion of w. w. bar shall be repaired.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
15	Name:-**NANDRE** Year of Completion: 1979 Location : Longitude: 74o 25 45” Latitude: 21o 00 05 Height: 17.37m Gross capacity:2.37 Mm3 Spillway capacity:382.0 cumecs Sr.No.in National Register of Large Dams:- MH09MH0778	21/05/2020 20/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Earth Dam	Leakage through COT in gorge portion due to partial COT.(A1)	Leakages appearing on d/s shall immediately be treated by providing inverted filters at exit points & the path of leakage from u/s shall be traced out & treated properly.	As per circle letter no TB-2/3336/dt 28/09/2021, this project is transferred to soil and water conservation department for repairing work according to Chief Ministers water conservation scheme. Proposal is submitted to corporation level.
					Boils,wet patches on d/s of dam.(A1)	Boils shall be treated by providing ring bunds around boils to the appropriate ht. to decipate the exit gradient & for wet patches proper drainage arrangement should be provided so that d/s 200 m area will remain dry.	
				Outlet	Outlet is not working condition since 13 years.(B5)	Necessary repairs should be carried out with the help of Mechanical Organisation.	
					Leakage through underground. Hence water is stored for one month only. (A1)	.Inspection should be carriedout & the causes of leakages weather it is through body of dam or through foundation should be found out& remedial measures should be carriedout with consultation with CDO.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
16	Name:**KHOLGHAR** Year of Completion: 1986 Location: Longitude: 74o 49 00 Latitude: 20o 39 00 Height: 26.0 m Gross capacity:4.314 Mm3 Spillway capacity: 470.99 cumecs Sr.No.in National Register ofLargeDams: MH09MH1121	13/05/2020 24/12/2020 06/1/2021	Shri. V.R.Darade E.E.D.I.D. Dhule Shri. C.T. Mondhe E.E. DSO, Nashik	Earth Dam	General condition of dam is not satisfactory. Settlement of d/s slope.Dam section and dam top width is not as per design.(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	Remedial measures are done.
				Outlet	H.R. masonry of well is fully damaged.Outlet hoist not in proper line.Gate is in closed position.(A18)	Damaged portion shall be repaired or reconstruct.	
					Piping is observed near junction of conduit and earthwork.(A4)	Piping hould be monitored & Necessary repairs should be carried out.	Preparation of estimate at sub division level is in process.
				WW.&TC	Scouring at d/s and u/s of bar.Scouring observed in tail channel.(A7)	Scouring on d/s to be repaired by concrete filling suitably.	
					EDA is totally collapsed.D/S guide wall washed away.(A14)	Damaged portion of EDA shall be repaired.	
						Necessary repairs should be carried out immidetely.for guide wall.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
17	Name:**DHANIBARA** Year of Completion: 1985 Location: Longitude: 74o 48 00 Latitude: 21o 02 00 Height: 19.65m Gross capacity: 1.660Mm3 Spillway capacity: 418.8 cumecs Sr.No.in National Register of Large Dams:- MH09MH1085	13/05/2020 24/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Earth Dam	Small leakage on d/s slope when dam is full. Dam top is settled. (A1 & B3) Top width is not as per design.(B1)	Leakages appearing on d/s shall be treated immediately by providing inverted filters at exit points & the path. leakage from u/s shall be traced out & treated properly i.e. filling with impervious soil blanket or filling on u/s side Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	This work will be done by District water conservation officer, soil and water conservation Dhule and estimation preparation is in progress.
				Outlet W.W&TC	Leakage observed through gate & head wall (A4)	The leakage may be due to damages or misalignments of stem rods, damages to rubber seal, improper operation of hoist etc. The repair shall be carried out with the help of Mechanical Organization to minimize leakages	
					Heavy leakage through pipe conduit (A4) Leakages in outlet well.(A6)	All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly.	

					Outlet & earth work is not properly protected hence carries leakage. (A4) H.R well required to reconstruct.(A6) WW bar is in damaged condition.(B7) EDA required to reconstruct.(A14)	Causes of leakages should be investigated & treated accordingly. Necessary action should be taken. Damaged portion of w.w.bar shall be repaired. Necessary repairs should be carried out.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
18	Name: **KHANDLAY** Year of Completion: 1974 Location: Longitude: 74o 25□ 45 □□ Latitude: 21o 00□ 05 □□ Height: 21.90 m Gross capacity:1.593 Mm3 Spillway capacity: 413.00 cumecs Sr.No.in National Register of Large Dams: MH09MH0430	21/05/2020 21/11/2020	Shri V.R.Darade E.E.D.I.D. Dhule	Earth Dam	Section is not as per design.(B1) Concavity on u/s & d/s slope. Top width is less than 3.0 m. (B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly	Preparation of estimate at sub division level is in process
					Standing pool on d/s.(A2)	The d/s area at least up to above 200m. from toe, shall be free from stagnation of water The area should be well drained so as to avoid any stagnant pools of water.	
				Outlet	Heavy crack from top to 3m. downward to well. Leakage from well. (A6)	Damaged portion of well shall be monitored & repaired properly.	
					Leakage through gate.(B12)	Causes of leakages should be investigated & treated accordingly.	
					Two numbers of stem rod are bent.(B5)	Necessary repairs should be carried out in consultation with Mechanical Organisation.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
19	Name:**KHOKASA** Year of Completion: 1995 Location: Longitude: 74o 40□ 12□□ Latitude: 21o 34□ 00□□ Height: 24.72 m Gross capacity:1.523 Mm3 Spillway capacity: 135.0 cumecs Sr.No.in National Register of Large Dams-: MH09MH1368	14/05/2020 25/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Earth Dam Outlet	Embankment is undersection. Some concavity in d/s slope. D/S slope is not as per design.. (B1 & B3) Standing pool on d/s of dam.Clean water is flowing d/s of dam at chainage 160 m,240 m,330m(0.25 Cusecs @FSL) (A2) Leakage through gate (2 to 3 cusecs) (A4) Leakage through masonry of well & pipe joint.(A4)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly. The d/s area at least up to above 200m. from toe, shall be free from stagnation of water The area should be well drained so as to avoid any stagnant pools of water The leakage may be due to damages or misalignments of stem rods, damages to rubber seal, improper operation of hoist etc. The repair shall be carried out with the help of Mechanical Organization to minimize leakages Location & amount of leakages shall be monitored and if large then necessary treatment on u/s & d/s of the affected area may be carried out to minimize leakage	Preparation of estimate at sub division level is in process
					Leakage through conduit (2 To 3 Cusecs).Every day water level is reducing by 5 cm even the gate is in closed position.(A4)	All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
20	Name:**SHELBARI** Year of Completion: 1982 Location: Longitude: 74o 08□ 30□□ Latitude: 20o 50□ 00□□ Height: 20.70 m Gross capacity:1.589 Mm3 Spillway capacity: 403.0 cumecs Sr.No.in National Register of Large Dams: MH09MH0929	17/0/2020 16/10/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Earth Dam	Leakage Or oozing on d/s slope of embankment.(A3)	Leakages appearing on d/s shall immediately be treated by providing inverted filters at exit points & the path of leakage from u/s shall be traced out & treated properly i.e. filling with impervious soil blanket or filling on u/s side	Preparation of estimate at sub division level is in process
				WW & TC	Leakage through foundation of masonry bar.(B7)	Location & amount of leakages shall be monitored and if large then necessary treatment in the affected area & on its u/s may be carried out to minimize leakage.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
21	Name:**CHHAWADI** Year of Completion: 1973 Location: Longitude: 74o 31□ 00□□ Latitude: 21o 06□ 00□□ Height: 17.20 m Gross capacity:4.420 Mm3 Spillway capacity: 1243.00 cumecs Sr.No.in National Register of Large Dams: MH09MH0383	07/05/2020 18/11/2020	Shri. D.B.Bhere E.E.D.I.D. Dhule	Earth Dam	Embankment is not in good condition Top width is less than 3.0 m. i.e. 1.5 m. to 2.5 m. (B1,B3). U/S & D/S slopes shows signs of slips bulging or concavity.(B3)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly	Preparation of estimate at sub division level is in process
					Longitudinal cracks, rain cuts, crab holes in the embankment. (B4)	Longitudinal cracks shall be excavated & filled with by soil & sandy material with proper proportion. Rain cuts shall be filled by heavy drainable casing material.	
				WW& TC	Masonry bar is not in good condition. Bar is broken.Leakage through masonry & foundation. (B7)	Damaged portion of w.w.bar shall be repaired. Causes of leakages should be find out & repairs should be carried out accordingly.	Remedial measures are done.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
22	Name:**HALDANI** Year of Completion: 1989 Location: Longitude: 73o 58 00 Latitude: 21o 09 00 Height: 19.42 m Gross capacity:3.420 Mm3 Spillway capacity: 410.00 cumecs Sr.No.in National Register of Large Dams: MH09MH1231	14/05/2020 25/11/2020	Shri. D.B.Bhere E.E.D.I.D. Dhule	Earth Dam	Embankment settlement in gorge by 0.6 m. Section is not as per design. Rain cuts noticed. (B1,B3 & B4)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly	Remedial measures are done.
				Outlet	Head regulator is collapsed.(A6)	Necessary repairs should be carried out.	Preparation of estimate at sub division level is in process
				WW& TC	Scouring in tail channel, 4 m. to 5 m drop observed.(A7)	If retrogression is moving closer to the EDA of spillway or waste weir bar, protective measures, shall be undertaken to prevent progressive damage. Extent of retrogression should be ascertained and monitors every year by mapping.If the problem of retrogression is moving upstream and serious for geological investigation the problem shall be referred to respective organization for undertaking investigations and studies for evolving suitable solution to the problem.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
23	Name:**GADHAD-DEO** Year of Completion: 1998 Location: Longitude: 74o 50□ 30□□ Latitude: 21o 36□ 30□□ Height: 22.80 m Gross capacity:1.73 Mm3 Spillway capacity: 230.80 cumecs Sr.No.in National Register of Large Dams: MH09MH1468	02/05/2020 20/10/2020	Smt. S.G. Shahpure E.E.D.I.D. Dhule Shri. V.R.Darade	EE	General condition of dam is not good.The crest profile is not at proper elevation.Top width,u/s & d/s slope is not as per design.(B3)	Necessary repairs should be carried out.	Preparation of estimate at sub division level is in process
				Outlet	Leakage through gate.(10c to 15 LPS.(B5)	Leakages should be stopped by consulting Mechanical Organisation	
				WW& TC	Leakage through masonry of WW bar.(10 to 20 LPS)(B7)	Necessary repairs should be carried out.	
					Left side wall between WW bar & embankment is collapsed.	Necessary repairs should be carried out.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
24	Name: **KABRYAKHADAK** Year of Completion:2002 Location: Longitude: 74o01□ 00□ □ Latitude: 21o 42□ 00 □□ Height: 21.82 m Gross capacity:3.959 Mm3 Spillway capacity: 429.46 Sr.No.in National Register of Large Dams:MH09MH1610	16/05/2020 16/10/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	EE	Settlement of earthwork above conduit pipe of HR.(B3)	Necessary repairs should be carried out.	As per Government of Maharashtra, WRD GR no 1/04/2022 administrative approve and as per division letter no PB-4/ 4782/2022 dt 27/06/2022 estimate for technical saction is submitted at circle level.
				Outlet	During DSO visit field officers reported that embankment near flank wall where cavitation occurred during rainy season. This cavitation was filled with casing material. This may be due to piping through embankment/leakage through flank wall.(A1&A15)	Bentonite grouting will help to arrest leakages.	
				WW & TC	Leakages were noticed on D/S side of dam from head wall outlet pipe .It is at higher level than conduit pipe.(A4)	Path of leakage should be find out & necessary repair should be carried out to prevent the leakage	
					Leakages from conduit outlet were also noticed.(A4)Seepage water from embankment may entering the conduit pipe in addition to the gate leakages.	Path of leakage should be find out & necessary repair should be carried out to prevent the leakage	
					The masonary structure of WW bar is heavily damaged on d/s side.(B7) EDA & end weir is heavily damaged & collapsed.(A14)	Necessary repairs should be carried out immediately. Necessary repairs should be carried out immediately.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
25	Name:**VIRKHEL** Year of Completion: 1977 Location: Longitude: 74o 49□ 00 □□ Latitude: 20o 39□ 00 □□ Height: 15.5 m Gross capacity:0.8 Mm3 Spillway capacity: 286.00 cumecs Sr.No.in National Register of Large Dams:MH09MH0419	18/05/2020 16/10/2020	Shri. VR.Darade E.E.D.I.D. Dhule	EE	Top width is short in all length of dam.(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	Preparation of estimate at sub division level is in process.
					Abnormal leakages through rock toe.	Necessary repairs should be carried out.	
				WW & TC	Scouring on d/s side of bar.(A7)	Necessary repairs should be carried out.	
					Leakage through COT is observed.(B3)	Necessary repairs should be carried out.	
26	Name:**SHEWADE** Year of Completion: 1980 Location: Longitude: 74o 36□ 00 □□ Latitude: 21o 10□ 00 □□ Height: 10.5 m Gross capacity:1.156 Mm3 Spillway capacity: 230.00 cumecs Sr.No.in National Register of Large Dams:MH09MH0829	07/05/2020 18/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	EE	From chainage 510m to 780m.U/S slope of dam is slip from top of dam.(B3)	Necessary repairs should be carried out	Preparation of estimate at sub division level is in process.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
27	Name:**ROZAWA** Year of Completion: 1977 Location: Longitude: 73o 52 12 Latitude: 21o 04 00 Height: 26.70 m Gross capacity:1.738 Mm3 Spillway capacity: 198.75 cumecs Sr.No.in National Register of Large Dams:MH09MH0612	06/05/2020 02/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Outlet WW & TC	Outlet well is not in good condition. (A6) Heavy leakages through masonary of WW bar when the dam is at FSL .(B7)	Necessary repairs should be carried out. Necessary repairs should be carried out.	For this work tender is completed and todays date water is stored in dam and when water level is down work will be done

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
28	Name: **RANGAWALI** Year of Completion:1990 Location: Longitude:73o52□ 00□□ Latitude: 20o04□ 00□□ Height: 25.63 m Gross capacity:15.02 Mm3 Spillway capacity:1167.32 cumecs Sr.No.in National Register of Large Dams: MH09MH0942	14/05/2020 25/11/2020	Shri. V.R.Darade E.E.D.I.D. Dhule	Earthen Embankment	Embankment is under section.	Dam section should be checked as per design & restore it as per design section.	Preparation of estimate at sub division level is in process.
				Outlet	Leakage through conduit concrete & pipe joint.	Path of leakage should be find out & necessary repair should be carried out to prevent the leakage.	
					Leakage through outlet well	Necessary repairs should be carried out.	
				Waste weir bar & Tail channel	Scouring in tail channel. Check wall is damaged.	Scouring on d/s to be repaired by concrete filling suitably. Check wall should be repaired.	
					Due to heavy flood, scouring of embankment of guide bund on L/S of tail channel.	Necessary repairs should be carried out of embankment of bund.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
(b)EXECUTIVE ENGINEER, JALGAON IRRIGATION DIVISION, JALGAON							
29	Name: **AGNAWATI** Year of Completion:1989 Location: Longitude:75o 13 00 Latitude: 20o 29 00 Height: 14.83 m Gross capacity:3.00 Mm3 Spillway capacity:952.0 cumecs Sr.No.in National Register of Large Dams: MH09MH1225	14/05/2020 30/11/2020	Shri.L.M. Shinde E.E.J.I.D. Jalgaon	Earth Dam	Dam section is not as per design. Rain cuts are observed.(B1)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	Yet not attended as the work considered in Drip II Scheme but this project was droped from the scheme of Central Government so as per current CSR Estimate preparation is going on at Sub division level.
					Standing pool observed at 60 m from d/s toe of dam between ch.1700 to 1750m.(A2)	The d/s area at least up to above 200m. from toe, shall be free from stagnation of water The area should be well drained so as to avoid any stagnant pools of water	Work Done
				WW&TC	Scouring in bottom of EDA & d/s of end wall.(A7) Leakage through right side flank wall (B7)	Scouring on d/s to be repaired by concrete filling suitably. Necessary repairs be carried out after investigating the path of leakage.	Yet not attended as the work considered in Drip II Scheme but this project was droped from the scheme of Central Government so as per current CSR Estimate preparation is going on at Sub division level.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
(c)EXECUTIVE ENGINEER, GIRNA IRRIGATION DIVISION, JALGAON							
30	Name:**KRUSHNAPURI** Year of Completion:1987 Location: Longitude: 75o 04□ 00□□ Latitude: 20o 56□ 00□□ Height: 14.15 m Gross capacity:2.176 Mm3 Spillway capacity:595.0 cumecs Sr.No.in National Register of Large Dams:-MH09LH1166	28/05/2020 06/11/2020	Shri.D.B. Behere E.E.G.I.D. Jalgaon	Outlet	Leakage observed through junction of pipe.(A4)	Leakages should be stopped by consulting Mechanical Organisation	Work completed in 2020-21.
				W.W&TC	Leakage through WW bar.(B7)	Necessary remedial measures should be carried out.	Work will be completed in 2022-23.
					Scouring on d/s of bar.(A7)	Necessary remedial measures should be carried out.	Work will be completed in 2022-23.
31	Name: **RAJDHERE** Year of Completion:1981 Location: Longitude: 74o 52□ 00□□ Latitude: 20o 18□ 00□□ Height: 17.05 m Gross capacity:1.94Mm3 Spillway capacity:312.62 cumecs Sr.No.in National Register of Large Dams:-MH09MH0874	29/05/2020 06/11/2020	Shri.D.B. Behere E.E.G.I.D. Jalgaon	EE	Standing pool of water observed in nalla portion of d/s of dam.(A2)	The d/s area at least up to above 200m. from toe, shall be free from thick vegetation. The area should be well drained so as to avoid any stagnant pools of water.	Work completed in 2020-21.
					Water logging in nalla portion of d/s of dam.(A2)	Necessary remedial measures should be carried out.	Work completed in 2020-21.
					Scouring on d/s side of bar, coping is necessary at d/s of ww bar.(A7)	Necessary remedial measures should be carried out.	Not yet done
					Leakage through COT	Necessary remedial measures should be carried out.	Not yet done

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
32	Name: **VALTHAN** Year of Completion:1987 Location: Longitude: 75o04 00 Latitude: 20o56 00 Height: 14.15 m Gross capacity:2.176 Mm3 Spillway capacity:595.00 cumecs Sr.No.in National Register of Large Dams:-MH09LH1166	29/05/2020 06/11/2020 03/02/2021	Shri.D.B. Behere E.E.G.I.D. Jalgaon Shri. C.T. Mondhe E.E. DSO, Nashik	EE WW Bar & Tail Channel	Standing pool of water observed in nalla portion of d/s of dam.(A2)	s area at least up to above 200m. From toe, shall be free from thick vegetation. The area should be well drained so as to avoid any stagnant pools of water.	Work completed in 2021-22.
					Longitudinal cracks, Rain cuts, crab holes observed .	Necessary remedial measures should be carried out.	Work completed in 2021-22.
					Scouring on d/s side of bar,coping is necessary at d/s of ww bar.(A7)	Necessary remedial measures should be carried out.	Work will be completed in 2022-23.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
(2)SUPERINTENDING ENGINEER,JIPC , JALGAON							
(a) EXECUTIVE ENGINEER, MINOR IRRIGATION DIVISION, JALGAON							
33	Name:**GANGAPURI** Year of Completion:1994 Location: Longitude:75o 06□ 00 □□ Latitude: 21o 21□ 00□□ Height: 17.93 m Gross capacity:2.392 Mm3 Spillway capacity:380.0 cumecs Sr.No.in National Register of Large Dams: MH09MH1328	25/05/2020 NR	Shri. S.C.Ahire E.E.M.I.D. Jalgaon	Outlet	Leakage observed on d/s side of conduit through pipe joint. (1 Cusecs) (A4)	All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly. Scouring should be kept under observation	**Not Received**
					Scouring on d/s of EDA @ ch 15 m.to 40m. (A7)	Necessary remedial measures should be carried out.	
				WW. & T.C. .	Retrogression in tail channel between ch 15 m. to 40 m. & 168 m.to 229 m. (A7)	If retrogression is moving closer to the EDA of spillway or waste weir bar, protective measures, shall be undertaken to prevent progressive damage. Extent of retrogression should be ascertained and monitors every year by mapping.If the problem of retrogression is moving upstream and serious for geological investigation the problem shall be referred to respective organization for undertaking investigations and studies for evolving suitablesolution to the problem	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	7
34	Name:**SUR** Year of Completion:1994 Location: Longitude:75o 06 00 Latitude: 21o 21 00 Height: 17.93 m Gross capacity:2.392 Mm3 Spillway capacity:380.0 cumecs Sr.No.in National Register of Large Dams: MH09MH1328	29/05/2020 NR	Shri. S.C.Ahire E.E.M.I.D. Jalgaon	EE	Top width,U/S& D/S slopes are not as per design.(B3)	Dam section to be brought to correct design profile and level by adding earthwork duly compacted properly.	**Not Received**
					Standing pool are observed at chainage 20 m to 90 m and d/s of earthen dam.(A2)	The d/s area at least up to above 200m. from toe, shall be free from stagnation of water. The area should be well drained so as to avoid any stagnant pools of water.	
				WW. & T.C.	Leakage through outlet gate uopto 1 to 2 cusecs is noticed.(A4)	All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly.	
					Leakages from masonry of spillway bar are noticed. Leakage is observed from both side flank wall.(A7 & A15)	All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly	
					Scouring in tail channel on D/S of ww bar.(A7)	Scouring on d/s to be repaired by concrete filling suitably.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
35	Name:**MATRAN NALLA** Year of Completion:1994 Location: Longitude:75o 06□ 00□□ Latitude: 21o 21□ 00□□ Height: 17.93 m Gross capacity:2.392 Mm3 Spillway capacity:380.0 cumecs Sr.No.in National Register of Large Dams: MH09MH1328	20/05/2020 NR	Shri. S.C.Ahire E.E.M.I.D. Jalgaon	WW. & T.C.	Retrogression @ d/s side of drop at chainage 70 m.upto 360 m.in tail channel & damages to bridge of PWD on river Pal road due to heavy flood.(A7)	If retrogression is moving closer to the EDA of spillway or waste weir bar, protective measures, shall be undertaken to prevent progressive damage. Extent of retrogression should be ascertained and monitors every year by mapping. If the problem of retrogression is moving upstream and serious for geological investigation the problem shall be referred to respective organization for undertaking investigations and studies for evolving suitable solution to the problem.	**Not Received**
36	Name:**JONDHALKHEDA** Year of Completion:1997 Location: Longitude:76o 20□ 00□□ Latitude: 21o 02□ 30□□ Height: 20.39 m Gross capacity:2.114 Mm3 Spillway capacity:501.00 cumecs Sr.No.in National Register of Large Dams: MH09MH1437	20/05/202 NR	Shri. S.C.Ahire E.E.M.I.D. Jalgaon	W.W. & Tail Channel	Scouring is noticed in tail channel beyond chainage 30 m.(A7)	If retrogression is moving closer to the EDA of spillway or waste weir bar, protective measures, shall be undertaken to prevent progressive damage.	**Not Received**
					Foundation of toe wall of EDA is openeddue to erosion by heavy flood. (A7)	Necessary repairs should be carried out.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
[D] CHIEF ENGINEER, SPECIAL PROJECT, PUNE							
(1)SUPERINTENDING ENGINEER KUKADI IRRIGATION CIRCLE, PUNE							
(a) EXECUTIVE ENGINEER, KUKADI IRRIGATION DIVISION NO.2, SHRIGONDA							
37	Name:**TELENGHASHI** Year of Completion:1975 Location : Longitude:75o 26□ 00□□ Latitude: 18o 20□ 00□□ Height: 17.12 m Gross capacity: 1.070 Mm3 Spillway capacity:218.40 cumecs Sr.No.in National Register of Large Dams: MH09MH0486	25/05/2020 04/11/2020	Shri.S.V. Kale E.E.K.I.D.2 Shrigonda & Shri.S.N. Koli E.E.K.I.D.2 Shrigonda	Outlet	Repairs to outlet well masonry & cleaning of well is required.(A6)	Necessary repairs to be carried out.	**Not Received**
				WW&TC	Heavy leakage through masonry.Major repairs are required.(B7)	Location & amount of leakages shall be monitored and if large then necessary treatment in the affected area & on its u/s may be carried out to minimize leakage	
					Damages to concrete in bucket.(A14)	Damaged portion shall be repaired on priority.	
					Leakages through guide wall.(A14)	All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly.	
					Scouring on d/s at chainage 70 m to 80 m.(A7)	Scouring is to be monitored. Scouring on d/s to be repaired by concrete filling suitably.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
38	Name:**VISAPUR** Date of Completion:1926 Location : Longitude:74o 34 55 Latitude: 18o 48 46 Height: 25.60 m Gross capacity: 26.10 Mm3 Design spillway capacity:1968 cumecs Sr.No.in National Register ofLarge Dams: MH09HH0054	08/05/2020 27/11/2020	Shri.S.V. Kale E.E.K.I.D.2 Shrigonda	Drains	Drains are fully silt up and growth of vegetation is observed.(B2)	Necessary repairs should be carried out.	**Not Received**
				Outlet	Leakage through conduit about 50 LPM.(A4)	All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly.	
				W.W&TC	Scouring on d/s side of bar.(A7)	Scouring on d/s is to be repaired by concrete filling suitably.	
					Scouring noticed in tail channel up to 60 m length.(A7)	Scouring is to be monitored. Scouring on d/s to be repaired by concrete filling suitably.	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested	Implementation Status
1	2	3	4	5	6	7	8
39	Name:**NAIGAON** Year of Completion:1978 Location : Longitude:75o 24 00 Latitude: 18o 19 00 Height: 15.96 m Gross capacity: 2.368 Mm3 Spillway capacity: 756.24 cumecs Sr.No.in National Register of Large Dams: MH09MH728	05/05/2020 NR	Shri.S.V. Kale E.E.K.I.D.2 Shrigonda	Outlet	Gate is not functioning since last 25 Years.	Necessary repairs should be carried out with the help of Mechanical Organisation.	**Not Received**
					Repairs of well masonry & cleaning of well is necessary	Necessary repairs should be carried out.	
				WW&TC	Heavy leakages in spillway bar.(B7)	All leakages need to be attended in time. Causes of leakages should be investigated & treated accordingly.	
					Coping of bar is not in good condition.(B7)	Necessary repairs should be carried out.	
					Scouring on d/s of bar.(A7)	Necessary repairs should be carried out.	
					Guide bund of end portion is washed out.	Necessary repairs should be carried out.	
					Retrogression in tail channel.(A7)	If retrogression is moving closer to the EDA of spillway or waste weir bar, protective measures, shall be undertaken to prevent progressive damage.	

Table 2.8

ATR on Category-1 Deficiency in Class-I Dams (Private Owned)

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
---------- No Such Dams under this category is reported ----------						

Table 2.9

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

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
---------- No Such Dams under this category is reported ----------						

Table 2.10

ATR on Category-1 Deficiency in Class-II Dams (Private Owned)

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
---------- No Such Dams under this category is reported ----------						

Table 2.11
ATR on Category-2 Deficiency in Class-II Dams (Private Owned)

Sr. No	Dam Features	Date of Inspection	Inspecting Officer	Main Component of Dam	Significant Deficiencies Noticed	Remedial Measures Suggested	Implementation Status
1	2	3	4	5	6	7	8
MAHARASHTRA JEEVAN PRADHIKARAN, WATER MANAGEMENT DIVISION,NASHIK							
1.	Name**: Talegaon** Year of Completion:- **1987** Location : Longitude:- **73° 32 37** Latitude: - **19° 40 42** Height: **21.80 m.** Gross capacity **11.68 Mm³**Spillway capacity: **36.00 cumecs** Sr.No.in National Register of Large Dams: **MH09LH2058**	12/06/2020 18/06/2020	**Shri. C.T.Mondhe, E.E. D.S.D.3, Nashik**	Earth Dam	Some stagnant water in nallas portion & at one place D/S of dam toe was observed**.(A2)**	Stagnant Water should be drained out properly & record should be maintained against reservoir water levels.	**Not Received**
				W.W bar & T.C.	Ungated spillway bar is found in unfinished condition. Also height of both the flank wall of W.W. bar should be increased upto dam top level**.(B7)**	Remaining work of W.W. bar should be carried out immediately.	

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. 3 under Dam Safety Organization, Nashik exercise 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:

In all there are 294 Government owned Dams & 9 Private owned Dams are monitored by Dam Safety Organization, Nashik from safety point of view.

294 Government owned Dams constitute 69 Class-I & 225 Class-II Dams.. Private owned Dams constitute 1 Class I & 8 Class-II Dams.

Government owned Dams: Out of 294 dams, Pre Monsoon Reports were received for 276 Dams. However, out of 294 Dams, Post Monsoon Reports were received from 272 Dams. 13 Class-I & 27 class-II Dams Reports were not received in DSO. *[Ref. Table 3.1 & 3.2]*

3.3 Test dam inspection by Dam Safety Organization:

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 & 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 & Class-II Dam is carried out by EE, DSD, Nashik.

Government owned Dams: 100% Dams(09 Class-I, 25 Class-II)as proposed for test inspection were inspected by team of Dam Safety Organization, Nashik. *[Ref. Table 3.5]*

Private owned Dams: Out of 9 dams Pre monsoon inspection of 7 Private owned has done and Post Monsoon Inspections for all 9 Dams were carried out by DSO. *[Ref. Table 3.3 & 3.4]*

Following team of officers have inspected targeted Dams in North Maharashtra region

1) Shri A.S.Amale, Superintending Engineer Dam Safety Organization, Nashik
2) Shri P.S.Patare, ExecutiveEngineer, Dam Safety Division No.3, Nashik
3) Shri. G.P.Vadnerkar, Sectional Engineer, Dam Safety Division No.3, Nashik
4) Smt. P.P.Bhoye, Junior Engineer, Dam Safety Division No.3, Nashik

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

1) *Shri A.S.Amale, Superintending Engineer Dam Safety Organization, Nashik*
2) *Shri P.S.Patare, Executive Engineer, Dam Safety Division No.3, Nashik*
3) *Shri. A.V.Mendgule, Sub Divisional Engineer, Dam Safety Division No.3, Nashik*
4) *Smt. P.P.Bhoye, Junior Engineer, Dam Safety Division No.3, 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.

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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	69	225	62	63	214	209	0	0	0	0	9	47	33	166	68	631	214	1391
2	Private	1	8	1	1	6	8	0	0	0	0	1	1	8	25	1	10	8	107
	Total	70	233	63	64	220	217	0	0	0	0	10	48	41	191	69	641	222	1498

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

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

3.8: Conclusions :

3.8.1 Frequent deficiencies Class-I Dams

1. **A18**: Wire ropes of hoist not in good condition/hoisting structure damaged/cracked – (02 Dams)
2. **A 10** : Heavy leakages through porous pipes / through dam body un gallery / monolith joints (02 Dams)
3. **A-19** : Alternative power system generator for gate operation not working properly.(01 Dam)
4. **A.18**:Wire ropes of hoist not in good condition/ hoisting structure damaged/ cracked.(02 Dams)
5. **A 2**: Standing pool / Ponding / Water Logging / Slushy condition on D/S of Dam – (02 Dams)

3.8.2 Frequent deficiencies Class-II Dams

1. **B 7:** Waste weir/waste weir bar not in good condition/coping damaged/leakage through waste weir. (21 Dams)
2. **A 7** : Retrogression /scouring in tail channel – (12 Dams)
3. **A-4**: Major leakage through outlet conduit / pipe joints / gates. (14 Dams)
4. **B- 3:** Considerable settlement of embankment / rock toe/ pitching /u/s & d/s slope not as per design- (25 Dams)
5. **B-1:** Dam section is not as per design– (18 Dams)

3.9 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	588	54	9.03	494	84.01	40	6.80

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 2021-22

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 In DSO			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 In 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	11	12	13	14	15	16	17	18	19	20	21	22	23
	A) Chief Engineer, Water Resources Department, Nashik																					
1	SE,C.A.D.A Nashik	29	77	**106**	09	00	**09**	20	77	**97**	00	00	**00**	00	00	**00**	29	77	**106**	00	00	**00**
2	SE,CADA Ahamadnagar	04	00	**04**	03	00	**03**	01	00	**01**	00	00	**00**	00	00	**00**	04	00	**04**	00	00	**00**
	B) Chief Engineer, Tapi Irrigation Division Circle																					
4	SE, , CADA Jalgaon	18	76	**94**	00	00	**00**	18	76	**94**	00	00	**00**	00	00	**00**	13	76	**89**	05	00	**05**
5	SE,DIPC, Dhule	10	14	**24**	00	12	**12**	10	02	**12**	00	00	**00**	00	00	**00**	10	13	**23**	00	01	**01**
6	SE, JIPC,Jalgaon	07	17	**24**	00	06	**06**	00	00	**00**	07	11	**18**	00	00	**00**	06	06	**12**	01	11	**12**
	C) Chief Engineer, Kokan Region, Mumbai																					
1	SE, TIC, Thane	01	24	**25**	00	24	**24**	01	00	**01**	00	00	**00**	00	00	**00**	01	22	**23**	00	02	**02**
	D) Chief Engineer, (SP) Pune																					
1	**KIC, Pune**	00	17	**17**	00	00	**00**	00	17	**17**	00	00	**00**	00	00	**00**	00	15	**15**	00	02	**02**
	Total	**69**	**225**	**294**	12	42	**54**	50	172	**222**	07	11	**18**	00	00	**00**	63	209	**272**	06	16	**22**

Table 3.2

Dams for which Inspection Report of 2021-22 is Not Received in DSO, Nashik

Sr. No.	Pre & Post Monsoon Report Not Received (Both)		Either Pre or Post Inspection Report not received			
			Pre Monsoon		Post Monsoon	
	Class-I	Class-II	Class-I	Class-II	Class-I	Class-II
A)	**Chief Engineer, Tapi Irrigation Division Circle**					
I)	**Superintending Engineer , Dhule Irrigation Project Circle , Dhule**					
1)	**Executive Engineer, Girna river valley project division, Nashik**					
						1.Nanduri
II)	**Superintending Engineer & Administrator , C.A.D.A, Jalgaon**					
1)	**Executive Engineer, Jalgaon Irrigation Division, Jalgaon**					
					1.Suki	
					2.Hatnur	
					3.Mangrul	
					4.Mor	
					5.Bahula	

Sr. No.	Pre & Post Monsoon Report Not Received (Both)		Either Pre or Post Inspection Report not received			
			Pre Monsoon		Post Monsoon	
	Class-I	Class-II	Class-I	Class-II	Class-I	Class-II
III)	**Superintending Engineer, Jalgaon Irrigation Project Circle, Jalgaon**					
1)	**Executive Engineer, Minor Irrigation Division, Jalgaon**					
		1. Dighi-II	1)Haripura			
		2. Gagapuri	2)Waghzira			
		3. Hatgaon-II	3) Nimbadevi			
		4 Jondhalkheda	4) Borkheda			
		5. Nashirabad				
		6. Vadri				
		7.Matran Nalla				
		8. Chinchati (Lohara)				
		9. Galan-II				
		10.Kotgaon				
		11.Odhare				
2)	**Executive Engineer, Jalgaon Medium Project Division no. 1, Jalgaon**					
			1) Anjani			
			2) Gul			
3)	**Executive Engineer, Waghur Dam Division, Jalgaon**					
	1.Waghur					
B)	**Chief Engineer, Special Projects, Pune**					
I)	**Kukadi Irrigation Circle, Pune**					
1)	**Executive Engineer, Kukadi Irrigation Division 2 Narayangaon**					
						1.Yesarthav
						2.Palsunde

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
C)	Chief Engineer, Kokan Region , Mumbai					
I)	Superintending Engineer, Thane Irrigation Circle, Thane					
						1. Ambad
						2.Nanashi

Table 3.3

Status of Receipt 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	11	12	13	14	15	16	17	18	19	20	21	22	23
Class I																						
1.Comissinor Nashik Municipal Corporation Nashik																						
1	**Chehedi Bandara**	1	0	**1**	0	0	**0**	1	0	**1**	0	0	**0**	0	0	**0**	1	0	**1**	0	0	**0**
Class II																						
Superintending Engineer, Water management circle,Maharashtra Jeevan Pradhikar ,Nashik																						
1	Malmatha	0	1	**1**	0	0	**0**	0	1	**1**	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**
2	Talegaon	0	1	**1**	0	0	**0**	0	1	**1**	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**

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	11	12	13	14	15	16	17	18	19	20	21	22	23
1.Comissinor Malegaon Municipal Corporation ,Malegaon																						
1	Talwade	0	1	**1**	0	0	**0**	0	1	**1**	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**
2.Comissinor Dhule Municipal Corporation ,Dhule																						
1	Dedargaon	0	1	**1**	0	0	**0**	0	1	**1**	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**
Superintending Engineer,MIDC, Jalgaon																						
Executive Engineer, MIDC,Dhule																						
1	Motinalla	0	1	**1**	0	0	**0**	0	1	**1**	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**
3.Chief Officer, Igatpuri Nagar Prashad Igatpuri																						
1	Barabunglow	0	1	**1**	0	0	**0**	0	1	**1**	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**
4.Chief Officer, Manmad Nagar Prashad Manmad																						
1	Waghdardi	0	1	**1**	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**
5.Chief Officer, Nandgaon Nagar Prashad Nandgaon																						
1	Dahegaon	0	1	**0**	0	0	**0**	0	0	**0**	0	0	**0**	0	0	**0**	0	1	**1**	0	0	**0**
Total		1	8	**9**	0	0	**0**	1	7	**8**	0	0	**0**	0	0	**0**	1	8	**9**	0	0	**0**

Table 3.4

Dams for which Inspection Not carried out by DSO, Nashik(Private Owned)

Sr. No.	Pre & Post Monsoon Report Not Received (Both)		Either Pre or Post Inspection Report 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
---------- NIL ----------						

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, Water Resources Department, Nashik					
I) Superintending Engineer & Administrator , C.A.D.A, Nashik					
1) Executive Engineer, Nashik Irrigation Division, Nashik					
1	Mukane	19/01/2022	1	Ramshej	24/12/2021
			2	Pimpalnare	24/12/2021
			3	Dhaur	24/12/2021
			4	Nalegaon	24/12/2021
			5	Borkhind	10/01/2022
			6	Thangon	10/01/2022
			7	Saradwadi	10/01/2022
2) Executive Engineer, Palkhed Irrigation Division Nashik					
1	Punegaon	17/01/2022	1	Khirdisathe (100 Years)	10/02/2022

Sr. No.	Name of Dam	Date of Inspection	Sr. No.	Name of Dam	Date of Inspection
1	2	3	4	5	6
3)Executive Engineer, Ahmednagar Irrigation Division Ahmednagar					
1	Padoshi	08/02/2022	1	Waki	08/02/2022
			2	Sangavi	08/02/2022
			3	Ambhore	14/03/2022
4) **Executive Engineer, Malegaon Irrigation Division, Malegaon**					
1	Bhegu	05/01/2022	1	Lohashigave	11/01/2022
2	Chankapur (100 years)	05/01/2022	2	Kasari I	11/01/2022
			3	Dhanoli	04/02/2022
I) Superintending Engineer & Administrator , C.A.D.A, Ahemadnargar					
1) **Executive Engineer, Upper Pravara Division, Sangamner**					
1	Waki	19/01/2022			
B) Chief Engineer, Tapi Irrigation Division Circle					
I) Superintending Engineer, DIPC ,Dhule					
1) Executive Engineer, NMPD, Nandurbar					
1			1	Visarwadi	25/03/2022
I) Superintending Engineer, JIPC ,Dhule					
1) Executive Engineer, Minor Irrigation Division, Jalgaon					
			1	Nashirabad	15/03/2021

Sr. No.	Name of Dam	Date of Inspection	Sr. No.	Name of Dam	Date of Inspection
1	2	3	4	5	6
3) Executive Engineer, Girna River Valley Project Division, Nashik					
			1	Punand	05/01/2022
I) Superintending Engineer, CADA Jalgaon					
1) Executive Engineer, Dhule Irrigation Division, Dhule					
			1	Nandre	16/03/2022
			2	Kulthe	16/03/2022
			3	Kanoli	16/03/2022
2) Executive Engineer, Girna Irrigation Division, Jalgaon					
1	Girna	25/03/2022	1	Hatgaon I	15/03/2022
3) **Executive Engineer, Jalgaon Irrigation Division, Jalgaon**					
			1	Tondapur	15/03/2022
B) Chief Engineer, Kokan Region, Mumbai					
I) Superintending Engineer, TIC, Thane					
1) Executive Engineer, Minor Irrigation Division, Nashik					
1	Shrimant	07/01/2022	1	Roshani	04/01/2022
			2	Waigholpada	04/01/2022
			3	Cholmukh	07/01/2021

Sr. No.	Name of Dam	Date of Inspection	Sr. No.	Name of Dam	Date of Inspection
1	2	3	4	5	6
B) Chief Engineer, SP Pune					
I) Kukadi Irrigation Circle, Pune					
1) Executive Engineer, Kukadi Irrigation Division 2 Shrigonda					
			1	Bhatodi (100 years)	10/02/2022
Private Dams					
Class-I Dams			**Class-II Dams**		
1.Comissinor Nashik Municipal Corporation Nashik			**1Supritending Engineer, Water Management Circle,Maharashtra Jeevan Pradhikar ,Nashik**		
1	Chehedi Bandara	11/08/2021 17/01/2021	1	Malmatha	05/08/2021 09/02/2021
			2	Talegaon	03/08/2021 06/01/2021
			2.Comissinor Malegaon Municipal Corporation ,Malegaon		
			1	Talwade	05/08/2021 09/02/2021
			3.Comissinor Dhule Municipal Corporation ,Dhule		
			1	Dedargaon	05/08/2021 09/02/2021
			4.Supritending Engineer,MIDC, Jalgaon		
			Executive Engineer, MIDC,Dhule		
			1	Motinalla	05/08/2021 09/02/2021
			5.Chief Officer, Igatpuri Nagar Prashad Igatpuri		
			1	Bara Bunglow	03/08/2021 06/01/2021
			6.Chief Officer, Manmad Nagar Prashad Manmad		
			1	Waghdardi	------- 11/01/2021
			7.Chief Officer, Nandgaon Nagar Prashad Nandgaon		
			1	Dahegaon	------- 11/01/2021

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, NMR,NASHIK**	**33**	**77**	**110**	**0**	**02**	**33**	**0**	**09**	**77**
(I)	**SE, CADA, NASHIK**	**29**	**77**	**106**	**0**	**02**	**29**	**0**	**09**	**77**
1	EE, NID NASHIK	10	29	39	0	00	10	0	02	29
2	EE, PID NASHIK	05	03	08	0	00	05	0	00	03
3	EE, AID, AHMEDNAGAR	09	17	26	0	01	09	0	03	17
4	EE, MID, MALEGAON	04	28	32	0	00	04	0	04	28
5	EE,MULA ID,AHMEDNAGAR	01	00	01	0	01	01	0	00	00
(II)	**SE, CADA, AHMEDNAGAR**	**04**	**00**	**04**	**0**	**00**	**04**	**0**	**00**	**00**
1	EE, UPPDD, SANGAMNER	04	00	04	0	00	04	0	00	00
[B]	**CE, TIDC, JALGAON**	**35**	**107**	**142**	**0**	**07**	**34**	**0**	**18**	**96**
(I)	**SE, DIPC, DHULE**	**10**	**14**	**24**	**0**	**02**	**10**	**0**	**00**	**14**
1	EE, NMPD,NANDURBAR	04	10	14	0	00	04	0	00	10
2	EE,GRVP, NASHIK	02	02	04	0	02	02	0	00	02
3	EE,DMPD,DHULE	04	00	04	0	00	04	0	00	00
4	EE,MID DHULE	00	02	02	0	00	00	0	00	02
(II)	**SE, CADA, JALGAON**	**18**	**76**	**94**	**0**	**03**	**18**	**0**	**17**	**76**
1	EE.DID,DHULE	10	59	69	0	02	10	0	14	59
2	EE,JID, JALGAON	05	11	16	0	00	05	0	01	11
3	EE,GID, JALGAON	03	06	09	0	01	03	0	02	06
(III)	**SE, JIPC, JALGAON**	**07**	**17**	**24**	**0**	**02**	**06**	**0**	**01**	**06**
1	EE,MID. JALGAON	04	17	21	0	00	04	0	01	06
2	EE.JMPD NO 1 , JALGAON	02	00	02	0	02	02	0	00	00
3	EE, WAGHUR DAM DIV,	01	00	01	0	00	----	0	00	00

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
	JALGAON									
[C]	**CE, KIC,PUNE**	**00**	**17**	**17**	**0**	**00**	**00**	**0**	**05**	**17**
(I)	**SE, KIC, PUNE**	**00**	**17**	**17**	**0**	**00**	**00**	**0**	**05**	**17**
1	EE,KID NO 2 SHRIGONDA	00	15	15	0	00	00	0	05	15
2	EE KID NO 1 NARAYANGAON	00	02	02	0	00	00	0	0	02
[D]	**CE, KOKAN REGION, MUMBAI**	**01**	**24**	**25**	**0**	**00**	**01**	**0**	**01**	**24**
(I)	**SE, TIC THANE**	**01**	**24**	**25**	**0**	**00**	**01**	**0**	**01**	**24**
	EE, MID, NASHIK	01	24	25	0	00	01	0	01	24
	WRD Total	**69**	**225**	**294**	0	**09**	**68**	0	**33**	**214**
	Private Dams									
1	Comissinor Nashik Municipal Corporation Nashik	01	00	**01**	0	01	01	0	00	00
2	Superintending Engineer, Water management circle, Maharashtra Jeevan Pradhikar ,Nashik	00	02	**02**	0	00	00	0	02	02
3	**Commissioner Malegaon Municipal Corporation ,Malegaon**	00	01	**01**	0	00	00	0	01	01
4	**Commissioner Dhule Municipal Corporation ,Dhule**	00	01	**01**	0	00	00	0	01	01
5	Executive Engineer, MIDC,Dhule	00	01	**01**	0	00	00	0	01	01
6	Chief Officer, Igatpuri Nagar Prashad Igatpuri	00	01	**01**	0	00	00	0	01	01
7	Chief Officer, Manmad Nagar Prashad Manmad	00	01	**01**	0	00	00	0	01	01
8	Chief Officer, Nandgaon Nagar Prashad Nandgaon	00	01	**01**	0	00	00	0	01	01
	Private Total	**01**	**08**	**09**	**0**	**01**	**01**	**0**	**08**	**08**
	Grand Total	**70**	**233**	**303**	0	**10**	**69**	0	**41**	**222**

Note - 1. Out of 69 Govt. owned Class-I Dams, Only 07 Dams Pre Monsoon Report were not received in DSO where as Only 06 Dams Post Monsoon Report were not received in DSO.

2. Out of 225 Govt. owned Class-II Dams Only 11 Dams Pre Monsoon Report were not received in DSO and only 16 class II dam's Post Monsoon Report were not received in DSO.

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Table 3.7

Deficiency Classification(No. of Deficiency wise)

Sr. No	Authority	Total Number of Dams			Number of Deficiencies								
					Category–1			Category–2			Category–3		
		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
	Water Resources Department Dams												
[A]	**CE, NMR,NASHIK**	**33**	**77**	**110**	**0**	**0**	**0**	**06**	**45**	**51**	**303**	**522**	**825**
(I)	**SE, CADA, NASHIK**	**29**	**77**	**106**	**0**	**0**	**0**	**06**	**45**	**51**	**275**	**522**	**792**
1	EE, NID NASHIK	**10**	**29**	**39**	**0**	**0**	**0**	**00**	**09**	**09**	**99**	**235**	**334**
2	EE, PID NASHIK	**5**	**3**	**8**	**0**	**0**	**0**	**00**	**00**	**00**	**52**	**23**	**75**
3	EE, AID, AHMEDNAGAR	**9**	**17**	**26**	**0**	**0**	**0**	**02**	**14**	**16**	**72**	**90**	**162**
4	EE, MID, MALEGAON	**4**	**28**	**32**	**0**	**0**	**0**	**00**	**22**	**22**	**42**	**174**	**216**
5	EE,MULA ID,AHMEDNAGAR	**1**	**0**	**1**	**0**	**0**	**0**	**04**	**00**	**04**	**10**	**00**	**10**
(II)	**SE, CADA, AHMEDNAGAR**	**4**	**0**	**4**	**0**	**0**	**0**	**00**	**00**	**00**	**28**	**00**	**28**
1	EE, UPPDD, SANGAMNER	**4**	**0**	**4**	**0**	**0**	**0**	**00**	**00**	**00**	**28**	**00**	**28**
[B]	**CE, TIDC, JALGAON**	**35**	**107**	**142**	**0**	**0**	**0**	**41**	**95**	**136**	**314**	**614**	**928**
(I)	**SE, DIPC, DHULE**	**10**	**14**	**24**	**0**	**0**	**0**	**16**	**01**	**17**	**96**	**107**	**203**
1	EE, NMPD-2,NANDURBAR	**4**	**10**	**14**	**0**	**0**	**0**	**00**	**00**	**00**	**36**	**82**	**118**
2	EE,GRVP, NASHIK	**2**	**2**	**4**	**0**	**0**	**0**	**16**	**00**	**16**	**20**	**09**	**29**
3	EE.DMPD,DHULE	**4**	**0**	**4**	**0**	**0**	**0**	**00**	**00**	**00**	**40**	**00**	**40**

Sr. No	Authority	Total Number of Dams			Number of Deficiencies								
					Category–1			Category–2			Category–3		
		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
4	EE,MID,DHULE	0	2	2	0	0	0	00	01	01	00	16	16
(II)	**SE, CADA, JALGAON**	**18**	**76**	**94**	**0**	**0**	**0**	**13**	**87**	**100**	**159**	**448**	**607**
1	EE.DID,DHULE	10	59	69	0	0	0	06	71	77	77	331	408
2	EE,JID, JALGAON	5	11	16	0	0	0	00	07	07	54	72	126
3	EE,GID, JALGAON	3	6	9	0	0	0	07	09	16	28	45	73
(III)	**SE, JIPC, JALGAON**	**7**	**17**	**24**	**0**	**0**	**0**	**12**	**07**	**19**	**59**	**59**	**118**
1	EE,MID. JALGAON	4	17	21	0	0	0	00	07	07	35	59	94
2	EE.JMPD NO 1 , JALGAON	2	0	2	0	0	0	12	00	12	27	00	27
3	EE, WAGHUR DAM DIV, JALGAON	1	0	1	0	0	0	00	00	00	00	00	00
[C]	**CE, KOKAN REGION, Mumbai**	**1**	**24**	**25**	**0**	**0**	**0**	**00**	**01**	**01**	**11**	**146**	**157**
(I)	**SE, TIC THANE**	**1**	**24**	**25**	**0**	**0**	**0**	**00**	**01**	**01**	**11**	**146**	**157**
	EE, MID, NASHIK	1	24	25	0	0	0	00	01	01	11	146	157
[D]	**CE, KIC,PUNE**	**0**	**17**	**17**	**0**	**0**	**0**	**00**	**25**	**25**	**00**	**109**	**109**
(I)	**SE, KIC, PUNE**	**0**	**17**	**17**	**0**	**0**	**0**	**00**	**25**	**25**	**00**	**109**	**109**
1	EE,KID NO 2 SHRINGONDA	0	15	15	0	0	0	00	25	25	00	105	105
2	EE KID NO 1 NARAYANGAON	0	2	2	0	0	0	00	00	00	00	04	04
	WRD Total	**69**	**225**	**294**	**0**	**0**	**0**	**47**	**166**	**213**	**631**	**1391**	**2022**

Sr. No	Authority	Total Number of Dams			Number of Deficiencies								
					Category–1			Category–2			Category–3		
		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
	Private Dams												
1	Comissinor Nashik Municipal Corporation Nashik	1	0	0	0	0	0	1	0	1	10	0	10
2	Supritending Engineer, Water management circle,Maharashtra Jeevan Pradhikar ,Nashik	0	2	0	0	0	0	0	9	9	0	29	29
3	Comissinor Malegaon Municipal Corporation ,Malegaon	0	1	0	0	0	0	0	2	2	0	12	12
4	Comissinor Dhule Municipal Corporation ,Dhule	0	1	0	0	0	0	0	4	4	0	14	14
5	Executive Engineer, MIDC,Dhule	0	1	0	0	0	0	0	2	2	0	11	11
6	Chief Officer, Igatpuri Nagar Prashad Igatpuri	0	1	0	0	0	0	0	4	4	0	15	15
7	Chief Officer, Manmad Nagar Prashad Manmad	0	1	0	0	0	0	0	2	2	0	13	13
8	Chief Officer, Nandgaon Nagar Prashad Nandgaon	0	1	0	0	0	0	0	2	2	0	13	13
	Private Total	1	8	9	0	0	0	1	25	26	10	107	117
	Grand Total	70	233	303	0	0	0	48	191	239	641	1498	2139

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, Water Resources Department, Nashik					
I) Superintending Engineer & Administrator , C.A.D.A, Nashik					
1) Executive Engineer, Ahmednagar Irrigation Division, Ahmednagar					
1	Bhandardara	02	1	Ambit	04
			2	Ambikhalsa	05
			3	Ghodambe	05
2) **Executive Engineer, Mula Irrigation Division, Ahmednagar**					
1	Mula	04			
3) **Executive Engineer, Malegaon Irrigation Division, Malegaon**					
			1	Jamlevani	05
			2	Shinde	05
			3	Bhadane	06
			4	Talwade Bhamer	06
4) **Executive Engineer, Nashik Irrigation Division, Nashik**					
			1	Mahirawani	05
			2	Borkhind	04
B) Chief Engineer, Tapi Irrigation Division Circle					

I) Superintending Engineer, DIPC ,Dhule					
1) Executive Engineer, GRVP, Nashik					
1	Punand	07			
2	Susri	09			
I) Superintending Engineer, JIPC ,Dhule					
1) Executive Engineer, Jalgaon Medium Project Division No. 1 , Jalgaon					
1	Anjani	05			
2	Gul	07			
2) Executive Engineer, Minor Irrigation Division, Jalgaon					
			1	Sur	07
I) Superintending Engineer, CADA Jalgaon					
1) Executive Engineer, Dhule Irrigation Division, Dhule					
1	Ranipur	04	1	Mukti	05
2	Sarangkheda Barrage	02	2	Khaparkheda	05
			3	Wakwad	05
			4	Nandre	04
			5	Kholghar	07
			6	Dhanibara	09
			7	Khanday	07
			8	Khoksa	06
			9	Shelbari	02
			10	Chhawadi	04
			11	Haldani	05

			12	Ghadhav deo	06
			13	Virkhel	04
			14	Shewade	02
2)Executive Engineer, Jalgaon Irrigation Division, Jalgaon					
			1	Agnavati	07
3)Executive Engineer, Girna Irrigation Division, Jalgaon					
1	Manyad	07	1	Rajdehare	06
			2	Krushnapuri	03
B) Chief Engineer, Kokan Region, Mumbai					
I) Superintending Engineer, TIC, Thane					
1) Executive Engineer, Minor Irrigation Division, Nashik					
			1	Aad	01
B) Chief Engineer, SP Pune					
I) Kukadi Irrigation Circle, Pune					
1) Executive Engineer, Kukadi Irrigation Division 2 Shrigonda					
			1	Talanghshi	04
			2	Ratnapur	05
			3	Naigaon	09
			4	Chichondi Patil	04
			5	Ghodegaon	03

Private Dams					
Class-I Dams			**Class-II Dams**		
1.Comissinor Nashik Municipal Corporation Nashik			**1Supritending Engineer, Water Management Circle,Maharashtra Jeevan Pradhikar ,Nashik**		
1	Chehedi Bandara	01	1	Malmatha	05
			2	Talegaon	04
			2.Comissinor Malegaon Municipal Corporation ,Malegaon		
			1	Talwade	02
			3.Comissinor Dhule Municipal Corporation ,Dhule		
			1	Dedargaon	04
			4.Supritending Engineer,MIDC, Jalgaon		
			Executive Engineer, MIDC,Dhule		
			1	Motinalla	02
			5.Chief Officer, Igatpuri Nagar Prashad Igatpuri		
			1	Bara Bunglow	04
			6.Chief Officer, Manmad Nagar Prashad Manmad		
			1	Waghdardi	02
			7.Chief Officer, Nandgaon Nagar Prashad Nandgaon		
			1	Dahegaon	02

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

Class-I Dams with Category-2 Deficiency

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial measures suggested.
1	2	3	4	5	6	7
[A] CHIEF ENGINEER, NMR, NASHIK						
S.E. Administrator CADA Nashik						
(a) AHMEDNAGAR IRRIGATION DIVISION,AHMEDNAGAR						
1	Name-**BHANDARDARA** Year of Completion: **1926** Location Longitude: **73° 45 30** Latitude: **19° 32 43** Height: **82.35 m** Gross capacity: **312.60Mm³** Spillway capacity: **1500 m³/sec** Sr. No. in National Register of Large Dams :- **MH09HH0047**	16/05/2021 03/12/2021	Smt. A.H.Ahirrao S.E. & Adm. CADA Nashik	Masonry Dam	There is excessive seepage sweating on d/s face of the dam at ch. 935 ft, 1090 ft. 1140 ft,&1265 ft.**(A11)**	1.Source of seepage should be identified chainage wise along the length of masonry dam and seepage should be quantified with respect to reservoir water level. 2.Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3.Necessary repairs should be carried out with prior approval from competent technical authority. .
					Quantity of seepage not measured & recorded daily or periodically. Piezometer, inverted plunb bob & uplift pressure measuring gauge are out of order. **(B9)**	1.Necessary repairs should be carried out . 2.Instrumentation Research Division under DSO, Nashikmay be contacted for repairs

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial measures suggested.
1	2	3	4	5	6	7
d) MULA IRRIGATION DIVISION,AHEMADNAGAR						
2	Name:- **MULA** Year of Completion: **1971** Location Longitude: **74° 34□ 30□□** Latitude: **19° 21□ 30□□** Height: **46.67 m** Gross capacity: **736.32 Mm³** Spillway capacity:- **5946.53 m³/sec** Sr. No. in National Register of Large Dams :- **MH09HH0316**	17/05/20211 2/01/2021	Smt. A.H.Ahirrao S.E. & Adm. CADA Nashik	Earth dam	There is sign of water logging slushy condition on d/s of dam. D/s are is not clear of debris and free drainage. **(A2)**	1.The cause of water logging should be identified. Confirm whether this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 2.Necessary arrangements should be made like removing any obstacles or techno economical nallaregradation etc. so that water will not get stagnant.
				Spillway	Wet spot found in spillway section. **(A11)**	1.Source of Wet spot should be identified chainage wise along the length of spillway and leakages should be quantified with respect to reservoir water level. 2.Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3.Necessary repairs should be carried out with prior approval from competent technical authority.
				Masonry	Dampness observed in right side of masonry dam on d/s face**. (A11)**	1.Source of dampness/seepage should be identified chainage wise along the length of masonry dam and dampness/seepage should be quantified with respect to reservoir

						water level. 2.Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission. 3.Necessary repairs should be carried out.
				Spillway gates	Surface of gate and paint is deteriorated.**(B11)**	1.It may be repaired in consultation with the of Mechanical Organisation.

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial measures suggested.
1	2	3	4	5	6	7
[B] CHIEF ENGINEER, TAPI IRRIGATION DEVELOPMENT CORPORATION, JALGAON						
1)SE CADA JALGAON						
(a)EXECUTIVE ENGINEER, DHULE IRRIGATION DIVISION,DHULE						
3	Name :- **RANIPUR** Year of Completion: **1999** Location Longitude: **NA** Latitude: **Na** Height: **40 m** Gross capacity: 43.90 **Mm³** Spillway capacity: **Ungated** Sr. No. in National Register of Large Dams:- **MH09HH1481**	05/06/2021 15/12/2021	Shri. S.D.Dalvi SE & Adm. CADA Jalgaon	W.W & T.C	Waste weir bar needs to be arrested by provision of concrete structure wall.**(A7)**	1.Necessary repairs should be carried out.
					U/S and D/S face of w w bar needs pointing.**(B7)**	1.Location, type, and extent of the damages of the spillway bar should be identified and photographed. 2. Necessary repairs should be carried out.
				Outlet	Conduit is fully chocked by incident of 2006.**(A4)**	1.Record the findings and photograph the area. Notes, sketches, and photographs are useful in documenting and evaluating problems. 2.Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.
				Rock toe	Rock toe not seen.**(B3)**	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes,rock toe and drain) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3 Necessary repairs should be carried out in accordance with approved drawings.
4	Name :- **SARANGKHEDA BARRAGE** Year of Completion: **2008** Location	08/03/2021 17/12/2021	Shri. S.D.Dalvi SE,&Admn. CADA Jalgaon	Spillway	`Vertical lift gates highly deteriorated. Gates are in poor condition. **(B11)**	1.It may be repaired in consultation with the of Mechanical Organisation.

	Longitude: **74°32 15** Latitude: **21°25 30** Height: **13.34 m.** Gross capacity: **92.20 Mm³** Spillway capacity:- **50529.00 m³/sec** Sr. No. in National Register of Large Dams :- **MH09HH1770**			Hydro Mechanical Component.	Due to back water of Prakasha Barrage, D/S side of vertical gates were submerged upto 1.2 m. Hence corrosion found in all gates. Bottom panel of gates needs to be replaced. **(B11)**	1.Necessary repairs should be carried out in consultation with the of Mechanical Organisation and with prior approval from competent technical authority.

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial measures suggested.
1	2	3	4	5	6	7
(b) EXECUTIVE ENGINEER,GIRNA IRRIGATION DIVISION, JALGAON						
5	Name :- **MANYAD (JALGAON)**Year of Completion: **1973**Location Longitude: **74° 48 00"** Latitude: **20° 29 00** Height: **45.00 m** Gross capacity: **53.98Mm³** Spillwaycapacity: **3755 m³/sec** Sr. No. in National Register of Large Dams:- **MH09HH0387**	23/04/2021 18/11/2021	Shri. S.D.Dalvi SE & Adm. CADA Jalgaon	W.W. Bar & tail channel	Foundation erosion in Guide/Divide /Junction, Need to repair Immediately **(A16)**	1.Location, type, and extent of the damages of the guide wall should be identified and photographed . 2.Necessary repairs should be carried out in accordance with approved drawing with prior approval from competent technical authority.
				EDA	Erosion occurred in both wall No.1 & 2 in tail channel**.(A16)**	1.Location, type, and extent of the damages of the concerned wall should be identified and photographed . 2.Necessary repairs should be carried out in accordance with approved drawing .
					Erosion on D/S in both E.D.A. & wall No.1 **(A14)** Apron is also washed away Need to repair immediately**(A14)** Protection wall No.5 collapsed between Ch. 55 ti 125 m. Scouring is noticed between EDA & check wall No.1	1.Location, type, and extent of the deterioration of the EDA and protection wall should be identified and photographed. 2.Structural damages including misalignment, settlement, vertical and horizontal displacement should be checked. 3.Necessary repairs should be carried out in accordance with approved drawing with prior approval from competent technical authority. 4.If deterioration is extensive, repairs to the EDA, should be done in consultation with Central Design Organisation, Nasik
				Spillway	Surface of gate and paint is deteriorated.**(B11)**	1.It may be repaired in consultation with the of Mechanical Organisation.

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial measures suggested.
1	2	3	4	5	6	7
(2) S.E.JALGAON IRRIGATION PROJECT CIRCLE, JALGAON						
(a) EXECUTIVE ENGINEER,JALGAON MEDIUM PROJECT DIVISION No.1,JALGAON						
6	Name **:- GUL** Year of Completion: **2009** Location Longitude: **75° 22 40** Latitude: **21° 19 00** Height: **31.33 m** Gross capacity: **23.25 Mm³** Spillway capacity:- **1823.00 m³/sec** Sr. No. in National Register of Large Dams :- **MH09MH1955**	NR 10/11/2021	Shri. Y.K.Bhadane S.E. J.I.P.C. Jalgaon	Earthen Dam	Dam section is not as per design.**(B1**)	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Necessary repairs should be carried out in consultation with Central Design Organization , Nashik.
					Stairs are slippery needs to be cleaned.**(A8)** Inspection gallery lighting should be done **.(A8)**	1.Sufficient lighting arrangement should be provided throughout the length of drainage gallery to facilitate the maintenance & inspection of gallery with battery backup facility.
					Excessive leakages at Rd. 72m. due to monolithic joint & from porous drain. It should be rectify.**(A10)** Seepages at 3 to 4 locations needs to be repaired. **(A10)** Leakages to the intake well of right bank H.R.& conduit concrete from Ch. 251.15 m. to 253.20 m**.**	1. Source of leakage/seepages should be identified chainage wise along the length of gallery of the dam and leakages/seepages should be quantified with respect to reservoir water level. 2.Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3. Necessary repairs should be carried out

					Wet/ slushy patches observed in gorge portion from ch 635 to 655 m. **(A1)**	1.Record the findings and photograph the area 2.Determine the extent, severity, and cause of the wet/ slushy patches. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 3.Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 4.The seepage should be checked for turbidity which would show the presence of soil in the water. 5.Search for opening on the upstream side and plug it if possible. 6.Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 7.Necessary repairs should be carried out in consultation with Central DesignOrganisation, Nasik

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial measures suggested.
1	2	3	4	5	6	7
7	Name- **Anjani** Year of Completion: 2007 Location Longitude: 75^0 19' 00" Latitude: 20^0 54' 00" Height: 23.20 m Gross capacity: 36.78 Mm3 Spillway capacity: 1991.81 m3/sec Sr. No. in National Register of Large Dams :-MH09MH1954	NR 23/12/2021	Shri. S.D.Dalvi S.E. JIPC. Jalgaon	Hydro Mechanic Component	Gate No. 2 is in non operative condition &Goliath crane & trunnion buckle of gate No.2 is broken. **(A18)**	1.Necessary repairs should be carried out in consultation with the of Mechanical Organisation.
					Rubber seal & wire ropes of all three Gates need to be replaced. (**B12 & A18)**	1.It may be repaired in consultation with the of Mechanical Organisation and with prior approval from competent technical authority
					Standby Generator is needed. **(A19)**	1.Alternative power system Generator for gate operation should be provided and it should be always in proper working condition..
					Lifting arrangement is not provided for emergency gates. **(B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation.

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial measures suggested.
1	2	3	4	5	6	7
(2) S.E.DHULE IRRIGATION PROJECT CIRCLE,DHULE						
(a) EXECUTIVE ENGINEER, GIRNA RIVER VALLEY PROJECT DIVISION,NASHIK						
8	Name :-**PUNAND** Year of Completion: **2011** Location Longitude: **73° 52 30** Latitude: **20° 37 30** Height: **42.225 m** Gross capacity: **39.75 Mm³** Spillway capacity:- **1985.00 m³/sec** Sr. No. in National Register of Large Dams :- **MH09MH1820**	09/05/2021 19/11/2021 **05/01/2022**	SE,DIPC, Dhule Shri. M.S.Amle SE,DSO, Nashik Shri. P.S.Patare EE, DSO-3,Nashik Shri. G.P.Vadnerkar SDO,DSO-3 Nashik	Foundations	Drainage gallery is full of water**.** Lighting arrangement done but required to be repaired**.(A10)**	1.The water retained in gallery should be drained out filed officer are advised to carry out inspection gallery as per CWC guidelines and convey facts to DSO, Nashik. 2.The water level of outside sump of gallery is above the gallery can't be drained out naturally. 3.Tender of drilling horizontal hole in well of outside sump well is progress. The results of this work may please communicated to DSO, Nashik
					Visible leakage at right end of right side NOF portion also right side NOF section leakages are observed.**(A11)**	1.Source of leakage should be identified chainage wise along the length of NOF section and leakages should be quantified with respect to reservoir water level. 2.Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission. 3.Necessary repairs should be carried out.
				EDA	Due to rock erosion, pond developed near D/S of apron near R/S guide wall (Ch. 58.85 m. to 75 m. D/S side**) (A16 & A17)**	1.The extent and location of such erosion with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause

						of erosion 3Necessary erosion protection work should be carried out with prior approval from competent technical authority. 4.Iferosion is extensive erosion protection work should be done in consultation with Central Design Organisation, Nasik. 5.The cause of ponding should be identified. Confirm wheather this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 6.Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
				River Sluice	Rock erosion found near D/S of apron of spillway. **(A16)**	1.Location, type, and extent of the damages of the appron should be identified and photographed. 2.Necessary repairs should be carried out in accordance with approved drawing .
				`Earthen Dam	All weather road should be constructed.**(B6)**	1.Access road should be provided, repaired and maintained properly.
				Hydro Mechanic Component	Rubber seal of radial gate are to be changed. **(B12)**	1.It may be repaired in consultation with the of Mechanical Organisation
					Service gate and emergency gate of ICPO is not in working condition. **(B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation.

Sr. No.	Dam Features	Date of inspection	Inspecting Officer	Main component of dam	Observations / Significant deficiencies noticed.	Remedial measures suggested.
1	2	3	4	5	6	7
(2) S.E.DHULE IRRIGATION PROJECT CIRCLE,DHULE						
(a) EXECUTIVE ENGINEER, GIRNA RIVER VALLEY PROJECT DIVISION,NASHIK						
9	Name :-**Susri** Year of Completion: **2007** Location Longitude: **74°30 00** Latitude: **32°21 00** Height: **4.16 m** Gross capacity: **14.76 Mm³** Spillway capacity:- **1145.07 m³/sec** Sr. No. in National Register of Large Dams :- **MH09MH1797**	06/05/2021 11/12/2021	Shri. S.S. Khandekar SE,DIPC, Dhule	EDA	EDA cannot be inspected since ponding in stilling basin **(A8)**	1.Water from stilling basin should be drained and inspection should be carried out.
				Earthen Dam	Signs of bulging and concavity and rain cuts to u/s side slope between ch 1680m to 1800m. **(B3)**	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether there is any the bulging and concavity of the earthen embankment is under section or not. 3. Necessary repairs should be carried out.
					Standing pool of water is observed in river portion.**(A2)**	1.The cause of ponding should be identified. Confirm wheather this water is coming from reservoir through seepage or may be from toe drain. This stagnant water may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 2.Necessary arrangements should be made like removing any obstacles or techno economical nallaregradation etc. so that water will not get stagnant.
					Seepage is noticed at ch 1035m to 1290 m, 2400m to 3390m. **(A1)**	1.Record the findings and photograph the area.

						2.Determine the extent, severity, and cause of the seepage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 3.Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 4.The seepage should be checked for turbidity which would show the presence of soil in the water. 5.Search for opening on the upstream side and plug it if possible. 6.Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 7.Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik
				Hydro Mechanic Component	Surface of gate and paint is deteriorated.**(B11)**	1.It may be repaired in consultation.
					Trunnion pin cover of all gates required to be bolted at position tightly. Leakage through rubber seal at many places. **(A18)** The structure soundness of all members of gate and hoisting arrangement is not satisfactory.**(A18)**	1.It may be repaired in consultation with the of Mechanical Organisation
					Rubber seal lubrication mechanism is not working properly. **(B12)**	1.It may be repaired in consultation with the of Mechanical Organisation.
					Steel parts of spillway bridge needs painting, hoist bridge needs painting. **(B11)**	1.It may be repaired in consultation with the of Mechanical Organisation.

Table 3.12

Class-I Dams with Category-3 Deficiency

Sr. No	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design spillway Capacity (m3/ Sec)	Sr No. of Large Dam in National Register	Gated / Ungated	Date of Inspection	Deficiencies Noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
	[A] CHIEF ENGINEER NMR NASHIK										
	(1)SUPERINTENDING ENGINEER & ADMINISTRATOR, CADA, NASHIK										
	(a)EXECUTIVE ENGINEER, NASHIK IRRIGATION DIVISION, NASHIK										
1	Bhojapur	1972	70° 03□ 00□□ 19° 41□ 20□□	13.66	32.41	1488	MH09HH1142	Ungated	13/05/2021 06/12/2021	3.1, 3.26, 3.9. 3.13, 3.31, 3.6, 3.30, 3.28, 3.24, 3.27, 3.29	11
2	Gangapur	1965	73° 19□ 00□□ 20° 35□ 00□□	36.59	215.88	2294	MH09HH0113	**Gated**	05/05/2021 17/01/2021	3.24, ,Cat 3,3.1,3.28,3.21	05
3	Mukane	1995	73° 39□ 00□□ 19° 48□ 00□□	26.93	214.16	1938	MH09MH1380	Gated	08/05/2021 30/11/2021 **19/01/2022**	3.7, 3.26, 3.9, 3.31, 3.28, 3.27, 3.23, 3.20, 3.6,3.28,3.29,3.21	12
4	Waldevi	2003	73° 04□ 00□□ 19° 54□ 00□□	38.50	41.91	809	MH09HH1376	Ungated	08/05/2021 30/11/2021	3.26, 3.9, 3.25, 3.20, 3.31, 3.30, 3.28, 3.27,3.6,3.24	10
5	Kashyapi	1999	73° 36□ 24□□ 20° 04□ 08□□	47.77	52.69	580.55	MH09HH1479	Gated	25/05/2021 17/11/2021	3.30, 3.24,3.25,3.28,3.27, 3.1	06
6	Gautami Godavari	2008	73° 34□ 00□□ 19° 59□ 00□□	59.375	53.22	1808	MH09HH1778	Gated	25/05/2021 17/11/20.21	3.25, 3.27, 3.28, 3.26,3.22,3.30,	06
7	Bhavali	2009	73° 35□ 00□□ 19° 33□ 00□□	31.28	44.75	896	MH09HH1789	Ungated	08/05/2021 30/11/2021	3.1, 3.26, 3.25, 3.13, 3.36, 3.31, 3.28, 3.34, 3.30, 3.9,3.6,3.27	12
8	Darana	1912	73° 45□ 00□□ 19° 48□ 00□□	28.00	226.87	3336.00	MH09MH0037	**Gated**	08/05/2021 30/11/2021	3.1, 3.25, 3.16, 3.31, 3.21, 3.24, 3.20, 3.29, 3.6, 3.30,3.26,3.9,3.28,3.27	14
9	Karwa	1993	73° 48□ 00□□ 19° 40□ 00□□	31.84	59.59	2821.00	MH09MH1444	Gated	09/05/2021 06/12/2021	3.1, 3.26, 3.9, 3.25, 3.34, 3.28, 3.31, 3.21, 3.16, 3.22, 3.29, 3.6, 3.17,3.31,3.27	15

Sr. No	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design spillway Capacity (m3/ Sec)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection	Deficiencies Noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
10	Nandur Madhmeshwar	1910	73° 32□ 00□□ 19°55□ 00□□	14.52	29.91	2833.33	------	Gated	09/05/2021 03/11/2021	3.1, 3.28, 3.27, 3.20, 3.31, 3.24, 3.26,Cat 3	08
	(b)EXECUTIVE ENGINEER, PALKHED IRRIGATION DIVISION, NASHIK										
11	Ozarkhed	1982	73° 52□ 00□□ 20° 17□ 00□□	35.30	67.96	2400	MH09HH0943	Ungated	15/05/2021 22/12/2021	3.5, 3.10 3.25, 3.23, 3.33, 3.24	06
12	Punegaon	1998	73° 50□ 30□□ 20° 21□ 30□□	25.14	20.39	1170	MH09MH1486	Gated	15/05/2021 22/12/2021 **17/01/2022**	3.2, 3.26, 3.10, 3.7, 3.25, 3.28, 3.31, 3.11, 3.16, 3.24, 3.27,	11
13	Waghad	1979	73° 44□ 00□□ 20° 14□ 00□□	46.92	76.48	1350	MH09HH0797	Ungated	15/05/2021 22/12/2021	3.5, 3.10, 3.25, 3.1, 3.24,3.9,3.27,3.28,3.11	09
14	Palkhed	1976	73° 54□ 00□□ 20° 10□ 00□□	19.55	23.01	4592	MH09HH0532	Gated	15/05/2021 22/12/2021	3.5, ,3.16, 3.28, 3.31, 3.11, 3.21, 3.19, 3.24,3.9,3.27	10
15	Karanjawan	1974	73° 46□ 00□□ 20° 18□ 00□□	39.30	161.43	2724.00	MH09HH454	Gated	15/05/2021 22/12/2021	3.5, 3.7, 3.28, 3.21, 3.1,3.26,3.9,3.13,3.36,3.18,3.31,3.20,3.22,3.24,3.25, 3.27	16
	(c)EXECUTIVE ENGINEER, AHMEDNAGAR IRRIGATION DIVISION, AHMEDNAGAR										
16	Adhala	1976	74° 02□ 03□□ 19° 38□ 28□□	40.0	30.0	1582	MH09HH0594	Ungated	16/05/2021 03/12/2021	3.26, 3.9, 3.25, 3.27, 3.2, 3.31,3.22,3.30,3.36,3.29,3.24	11
17	Kothale	2007	73° 49□ 00□□ 19° 24□ 00"	35.59	5.17	490	MH09MH1938	Ungated	29/05/2021 04/12/2021	3.9, 3.25, 3.6, 3.30, 3.24,3.16,3.27	07
18	Titwi	2007	73° 49□ 00□□ 19° 34□ 00□□	31.80	8.59	577.49	MH09MH1941	Ungated	16/05/2021 03/12/2021	3.9, 3.25, 3.6, 3.30, 3.24,3.27	06
19	Shirpunje	2008	73° 49□ 15□□ 19° 32□ 00□□	37.85	4.4	269	MH09MH1940	Ungated	29/05/2021 04/12/2021	3.9, 3.25, 3.6, 3.30,3.26,3.31,3.24,3.27	08
20	Ghoti Shilwandi	2007	73° 53□ 00□□ 19° 27□ 00□□	32.20	4.53	312	MH09MH1937	Ungated	29/05/2021 04/12/2021	3.1, 3.6, 3.25, 3.24,3.9,3.27	06
21	Padoshi	2010	73° 52□ 00□□ 19° 40□ 00□□	30.91	4.134	721.23	MH09MH1939	Ungated	16/05/2021 03/12/2021 **08/02/2022**	3.6, 3.25, 3.30, 3.24,3.27,3.9,	06

Sr. No	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design spillway Capacity (m3/ Sec)	Sr No.of Large Dam in National Register	Gated/Ungated	Date of Inspection	Deficiencies Noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
22	Bhandardara	1926	73° 45□ 30□□ 19° 32□ 43□□	82.35	312.60	1500.00	MH09HH0047	Gated	16/05/2021 03/12/2021	3.1, 3.6, 3.9, 3.7, 3.25, 3.21, 3.31,3.20, 3.22,3.27,3.13	11
23	Balthan	2008	73° 49□ 00□□ 19° 28□ 00□□	28.52	5.72	318.22	MH09HH0047	Ungated	29/05/2021 04/12/2021	3.9, 3.25, 3.6, 3.30,3.19,3.24,3.27	07
24	Kalu (Bruhat)	2010	74° 28□ 45□□ 19° 12□ 15□□	----	8.188	----	----	Ungated	29/05/2021 04/12/2021	3.9,3.25,3.293.17,3.31,3.6,3.30,3.24,3.27,3.28	10
	(d)EXECUTIVE ENGINEER, MALEGAON IRRIGATION DIVISION, MALEGAON										
25	Kelzar	1980	73° 58□ 00□□ 20° 39□ 00□□	32.50	17.01	832	MH09HH0896	Ungated	13/05/2021 26/12/2021	3.9, 3.7, 3.25, 3.13, 3.21, 3.23, 3.31, 3.2, 3.28,3.26,3.30,3.27	12
26	Bhegu	2000	73° 46□ 00□□ 20° 36□ 00□□	34.66	2.77	2751	MH09HH1540	Ungated	13/05/2021 26/12/2021 **05/01/2022**	3.2, 3.1, 3.26, 3.9, 3.25, 3.13, 3.16, 3.34, 3.30, 3.24, 3.28,3.29	12
27	Haranbari	1980	74° 02□ 00□□ 20° 42□ 00 □□	34.00	34.78	1312	MH09HH0142	Ungated	13/05/2021 26/12/2021	3.26, 3.25, 3.13, 3.16, 3.21, 3.22, 3.31, 3.30,3.27	09
28	Chankapur	1911	73° 56□ 00□□ 20° 29□ 30□□	39.01	79.96	2236.00	MH09HH0028	Gated	13/05/2021 26/12/2021 **05/01/2022**	3.1, 3.9, 3.25, 3.28, 3.31, 3.30,3.18,3.22,3.27	09
	(e)EXECUTIVE ENGINEER, MULA IRRIGATION DIVISION, AHMEDNAGAR										
29	Mula	1971	74° 34□ 30□□ 19° 21□ 30□□	46.67	736.32	5946.53	MH09HH0316	Gated	17/05/2021 12/01/2022	3.6, 3.2, 3.13, 3.33, 3.7, 3.1, 3.36, 3.12, 3.21, 3.34	10
	(2)SUPERINTENDING ENGINEER & ADMINISTRATOR, CADA, AHMEDNAGAR										
	(a)EXECUTIVE ENGINEER, UPPER PRAVARA DAM DIVISION, SANGAMNER										
30	Nilwande	2010	73° 54□ 15□□ 19° 32□ 45□□	74.50	236.00	3700	MH09MH1942	Gated	19/05/2021 26/11/2021	3.33, 3.20, 3.22, 3.13, 3.25,3.30,3.27	07

Sr. No	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design spillway Capacity (m3/ Sec)	Sr No. of Large Dam in National Register	Gated/ Ungated	Date of Inspection	Deficiencies Noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
31	Bham	2018	---	--	--	--	--	Ungated	03/05/2021 13/12/2021	3.13, 3.2, 3.25, 3.20, 3.28, 3.26, 3.21,3.30,3.27	09
32	Waki	2016	---	34.90	75.80	1031.80	--	Gated	24/12/2021 13/012/2021 **19/01/2022**	3.13, 3.1, 3.25, 3.20, 3.31, Cat -3, 3.30,3.27	08
33	Pimpalgaon Khand	2019	73° 59□ 55□□ 19°26□ 00□□	30.39	16.99	2683.00	--	Ungated	29/09/2021 28/12/2021	3.13,3.24,3.30,3.27	04
[B] CHIEF ENGINEER TIDC, JALGAON											
(1)SUPERINTENDING ENGINEER DHULE IRRIGATION PROJECT CIRCLE, DHULE											
(a)EXECUTIVE ENGINEER, NANDURBAR MEDIUM PROJECT DIVISION NO.2, NANDURBAR											
34	Susari	2007	74 °30'00" 32° 21' 00"	24.72	9.64	1343.00	MH09MH1950	Gated	06/05/2021 11/12/2021	3.1,3.7,3.12,3.5,3.26,3.3,3.21,3.28,3.24,3.29,3.27	11
35	Dara	2008	74 °26'00" 21° 45' 00"	43.16	14.76	1145.07	MH09HH1797	Ungated	06/05/2021 11/12/2021	3.1, 3.26, 3.25, 3.20, 3.29, 3.6, 3.30,3.21	08
36	Shivan Vircheck	2007	75 °11'50" 21 °19'00"	31.30	24.19	1637	MH09MH1748	Gated	26/05/2021 26/12/2021	3.1, 3.12, 3.25, 3.36, 3.28, 3.31,3.20,3.26,3.27,3.30	10
37	Koradi(nalla)	2011	74 °21'30" 21° 14' 30"	31.50	13.45	1063.07	MH 09 MH1094	Ungated	26/05/2021 26/11/2021	3.1,3.5,3.13,3.25,3.26, 3.27,3.28	07
	(b)EXECUTIVE ENGINEER, GIRNA RIVER VALLEY PROJECT DIVISION,NASHIK										
38	Manikpunj	2000	74 °44' 00" 20° 05'00"	32.00	14.02	2032	MH09HH1786	Ungated	08/05/2021 04/12/2021	3.27, 3.20, 3.6,3.26,3.9,3.29,3.24,3.28,3.30	09
39	Punand	2011	73 °52' 30" 20° 37'30"	42.225	39.75	1985	MH09MH1820	Gated	09/05/2021 19/11/2021 **05/01/2022**	3.1,3.26,3.7,3.25,3.16,3.17,3.31,3.28, 3.21,3.29,3.6	11

Sr. No	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design spillway Capacity (m3/ Sec)	Sr No. of Large Dam in National Register	Gated/ Ungated	Date of Inspection	Deficiencies Noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
	(c)EXECUTIVE ENGINEER, DHULE MEDIUM PROJECT DIVISION,DHULE										
40	Wadi Shewadi	2009	74 °34'50" 21° 9'15"	33.65	36.93	3782	MH09HH1815	Gated	16/05/2021 10/12/2021	3.31, 3.20, 3.9,3.25,3.28,3.21,3.29,3.6,3.24,3.30	10
41	Akkalpada	2012	74 °27'22" 26° 56' 28"	36.565	109.31	9873	MH09HH1795	Gated	16/05/2021 14/11/2021	3.1,3.5,3.25,3.18,3.24, 3.31,3.28,3.20,3.6,3.36, 3.21	11
42	Sulwade Barrage	2008	N.A N.A	45.50	65.06	12000	MH09MH1814	Gated	16/05/2021 10/12/2021	3.18, 3.17, 3.20,3.21,3.31,3.28,3.29,3.6	08
43	Nagan	2007	73 °50'15" 20° 12' 19"	31.07	26.48	1550	MH09MH1791	Gated	26/05/2021 26/11/2021	3.1, 3.26, 3.13, 3.36, 3.12, 3.20, 3.34, 3.31, 3.24,3.28,3.21	11
	(2)SUPERINTENDING ENGINEER & ADMINISRTATOR,CADA,JALGAON										
	(a)EXECUTIVE ENGINEER, DHULE IRRIGATION DIVISION ,DHULE										
44	Amravati	2005	74 °30'00" 21° 17' 00"	17.19	27.78	419.57	MH 09 MH1644	Gated	19/05/2021 17/12/2021	3.1, 3.5, 3.9, 3.13, 3.18, 3.20, 3.28, 3.21, 3.23, 3.27, 3.6, 3.24,	12
45	Sarangkheda Barrage	2008	N.A N.A	13.34	92.20	50529	MH09HH1770	Gated	08/03/2021 17/12/2021	3.18, 3.20, 3.29, 3.6, 3.1, 3.24	06
46	Prakasha Barrage	2008	74 °48'00" 20° 29' 00"	29.13	63.64	50517	MH09HH1810	Gated	8/03/2021 17/12/2021	3.18, 3.19, 3.20, 3.29, 3.6, 3.1, 3.24,3.17,3.18,3.11	10
47	Burai	1984	74° 21□ 40□□ 21° 09□ 36□□	30.93	21.33	2149	MH09HH1009	Ungated	19/05/2021 23/12/2021	3.5, 3.1, 3.10, 3.9, 3.13, 3.16, 3.20, 3.21, 3.34, 3.7,3.24	11
48	Karwand	1970	74° 57□ 00□□ 21° 22□ 36□□	39.30	33.84	2461	MH09HH0226	Ungated	05/05/2021 27/12/2021	3.13, 3.27, 3.6, 3.24,3.16	05
49	Panzara	1973	74° 05□ 30 □□ 20°55□ 01	33.10	43.50	1768.00	MH09MH0385	Ungated	19/05/2021 23/12/2021	3.1, 3.9, 3.13, 3.33, 3.18, 3.24, 3.28,3.20	08
50	Ranipur	1999	NA	40.00	43.90	Ungated	MH09HH1481	Ungated	05/06/2021 15/12/2021	3.5, 3.9, 3.13, 3.24, 3.29	05

Sr. No	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design spillway Capacity (m3/ Sec)	Sr No. of Large Dam in National Register	Gated/ Ungated	Date of Inspection	Deficiencies Noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
51	Aner	1979	NA	47.00	31.62	4318	MH09HH0741	Gated	05/05/2021 27/12/2021	3.1, 3.5, 3.9, 3.13, 3.19, 3.18, 3.27, 3.24,	08
52	Sonwad	1999	NA	21.40	17.32	1428	MH09MH1487	Gated	19/05/2021 17/12/2021	3.1, 3.11, 3.5, 3.19, 3.13, 3.33, 3.18, 3.20, 3.28, 3.27, 3.22, 3.24,3.4	13
53	Jamkhedi	2001	74° 11□ 00□□ 21° 00□ 00□□	37.07	13.28	1663.44	MH09MH1593	Ungated	19/05/2021 23/12/2021	3.9, 3.20, 3.25, 3.28	04
	(b)EXECUTIVE ENGINEER, JALGAON IRRIGATION DIVISION, JALGAON										
54	Suki	1976	75° 54□ 00□□ 21° 18□ 00□□	42.00	50.57	2336	MH09HH0656	Ungated	19/04/2021 NR	3.5, 3.7, 3.1, 3.16, 3.18, 3.20, 3.28, 3.30, 3.24, 3.6,3.17,3.25	12
55	Bhokar (Mangrul)	1997	74° 48□ 00 □□ 20° 29□ 00 □□	33.07	8.98	1270	MH09HH1442	Ungated	19/04/2021 NR	3.7,3.1,3.13,3.22,3.36,3.21,3.6,3.30,3.24,3.9,3.25	11
56	Bahula	1997	75° 23□ 30 □□ 20° 42□ 15	16.64	20.032	3802.00	MH09MH1445	Gated	23/04/2021 NR	3.1, 3.5, 3.2, 3.26, 3.13, 3.18, 3.31, 3.30, 3.24	09
57	Mor	2003	75° 47□ 30" 21° 14□ 45"	47.45	9.505	1700	MH09HH1619	Gated	19/04/2021 NR	3.3,3.26,3.9,,3.33,3.36,,3.18,, 3.31,3.28,3.6,3.30,3.24, 3.19	12
58	Hatnur	1982	75° 57□ 00" 21° 41□ 00"	25.50	388	26415	MH09MH0948	Gated	19/04/2021 NR	3.9, 3.36, 3.18, 3.20, 3.28, 3.23, 3.6, 3.17,3.21,3.25	10
	(c)EXECUTIVE ENGINEER, GIRNA IRRIGATION DIVISION, JALGAON										
59	Girna	1969	74° 48□ 00 □□ 20° 29□ 00	54.50	608.98	8433.00	MH09MH0196	Gated	23/04/2021 18/11/2021 **25/03/2022**	3.6, 3.2, 3.25, 3.16, 3.21, 3.20, 3.31, 3.28, 3.25,	09
60	Manyad	1973	74° 48□ 00 □□ 20° 29□ 00	45.00	53.98	3755	MH09HH0387	Ungated	23/04/2021 18/11/2021	3.6, 3.19, 3.16, 3.32, 3.24,3.1,3.9	07
61	Bori	1976	75° 03□ 00□□ 20° 41□ 00 □□	22.80	40.31	267.10	MH09MH0659	Gated	23/04/2021 23/12/2021	3.1, 3.6, 3.2, 3.7, 3.13, 3.18, 3.31, 3.28, 3.19, 3.22, 3.30, 3.24	12

Sr. No	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design spillway Capacity (m3/ Sec)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection	Deficiencies Noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
(3)SUPERINTENDING ENGINEER,JALGAON IRRIGATION PROJECT CIRCLE,JALGAON											
(a)EXECUTIVE ENGINEER, MINOR IRRIGATION DIVISION,JALGAON											
62	Wagzira	1999	75° 36□ 00□□ 21° 16□ 00□□	34.85	2.002	381.00	MH09HH1659	Ungated	NR 15/01/2022	3.2, 3.22, 3.19, 3.16, 3.28, 3.6, 3.13,	07
63	Nimbadevi	1997	75° 37□ 00 □□ 21° 17□ 00	32.39	2.43	500.90	MH09HH1660	Ungated	NR 15/01/2022	3.2, 3.6, 3.13, 3.28,3.1,3.5,3.19,3.30	08
64	Borkheda	1997	75° 15□ 00 □□ 21° 15□ 00	30.64	1.94	239.96	MH09HH1658	Ungated	NR 25/11/2021	3.7, 3.5, 3.13, 3.21, 3.28, 3.6, 3.30, 3.24,3.1,3.10	10
65	Haripura	2010	76° 42□ 00□□□ 21° 17□ 00	41.27	5.998	833.00	MH09MH1956	Ungated	NR 25/11/2021	3.1, 3.24, 3.28, 3.30,3.5,3.2,3.22,3.6,3.13, 3.9	10
(b)EXECUTIVE ENGINEER, JALGAON MEDIUM PROJECT DIVISION No.1,JALGAON											
66	Anjani	2007	75° 19□ 00 20° 54□ 00	23.20	36.78	1991.81	MH09MH1954	Gated	NR 23/12/2021	3.9, 3.6, 3.2, 3.1, 3.26, 3.13, 3.18, 3.20, 3.34, 3.23, 3.31, 3.24, 3.20, 3.28	14
67	Gul	2009	75° 22□ 40 □□ 21° 19□ 00	31.33	23.25	1823.00	MH09MH1955	Gated	NR 10/11/2021	3.11, 3.5, 3.9, 3.13, 3.36, 3.12, 3.20, 3.34, 3.33, 3.31, 3.24,3.1,3.21	13
c)EXECUTIVE ENGINEER, WAGHUR DAM DIVISION DIVISION,JALGAON											
68	Waghur	2008	75° 43□ 0□□ 20° 54□ 0□□	39.50	325.00	16644.0	MH09LH1750	Gated	NR NR	-----	---
(5)SUPERINTENDING ENGINEER,THANE IRRIGATION CIRCLE,THANE											
(a)EXECUTIVE ENGINEER, MINOR IRRIGATION DIVISION,NASHIK											
69	Shrimant	2006	73 ° 24' 0" 20 ° 15'55"	39.31	11.63	352.1	MH09LH2037	Ungated	11/4/2021 19/11/2021 **07/01/2022**	3.1,3.5,3.7,3.2,3.26,3.17,3.25,3.31,3.29,3.30,3.24	11

Table 3.13

Class-II Dams with Category-1 Deficiency

Sr. No	Name of Dam	Year of Completion	Location	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3/sec	Sr. No. in NRLD Register 2009	Date of Inspection	Inspecting Officer
1	2	3	4	5	6	7	8	9	10
---------- No Such Dams under this category is reported ----------									

Table 3.14

Class-II Dams with Category-2 Deficiency

Sr. No	**Dam features**	**Date of inspection**	**Inspecting Officer**	**Main component of Dam**	**Observations / Significant deficiencies noticed**	**Remedial measures suggested**
1	**2**	**3**	**4**	**5**	**6**	**7**
[A] CHIEF ENGINEER NMR, NASHIK **(1) SUPERINTENDING ENGINEER &ADMINISTRATOR C.A.D.A. NASHIK** **(a) EXECUTIVE ENGINEER, NASHIK IRRIGATION DIVISION, NASHIK**						
1	Name: **BORKHIND** Year of Completion:**1995** Location: Longitude: **73°50 00** Latitude: 19°**45 09** Height: **19.59 m** Gross capacity:**1.576 Mm³** Spillway capacity: **7.62 cumecs** Sr.No.in National Register of Large Dams:-**MH09MH1347**	13/05/2021 12/12/2021 **10/01/2022**	Shri. D.D. Shinde E.E. N.I.D. Nashik Shri P.S.Patare EE, DSO-3, Nashik Shri. G.P.Vadnerkar, SDO, DSO-3,Nashik	Earthen Embankment	Top width, U/S & D/S slopes are not as per Design, Some concavity is noticed. **(B3)**	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3.Necessary repaired should be carried out.
				Drains	Drains are not functioning satisfactorily.**(B2)**	1.Drains should be cleared and desilted for carrying effective flow of
				Outlet	Leakage through outlet well masonry. **(A6**)	1.Outlet well should be surged and repaired to restore original working capacity of the well.
				WW & TC	Outlet gate is in closed position since last 5 years. **(B5)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
2	Name: **MAHIRAWANI** Year of Completion:**1984** Location: Longitude: **73° 39□ 00** □□ Latitude: **19° 57□ 00**□□ Height: **25.53 m** Gross capacity: **2.633 Mm³** Spillway capacity: **196 cumecs** Sr.No.in National Register of Large Dams:-**MH09MH0683**	25/05/2021 13/12/2021	Shri. S.D. Shinde E.E. N.I.D. Nashik	Outlet	There is about 2 cusecs leakage through masonry of conduit.**(B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation
					Leakage seen from side wall of conduit & conduit concrete.**(A4)** Seepage observed near and around the junction of conduit. Concrete and earthwork. (2 Cusecs) **(A4)**	1.Determine the extent, severity, and cause of the seepage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 2.Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 3.The seepage should be checked for turbidity which would show the presence of soil in the water. 4.Search for opening on the upstream side and plug it if possible. 5.Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 6.Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik
					WW bar is not in good condition.**(B7)**	1 Location, type, and extent of the damagesPhotographed. 2. Necessary repaired should be carried out in accordance with approved drawings.
				W.W.&T.C	Scouring on D/S side of WW bar (50 m. below) is seen. **(A7)**	1.The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2.Dam owner should identify the cause of scouring 3.Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4.If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik
Sr.	**Dam features**	**Date of**	**Inspecting**	**Main**	**Observations / Significant**	**Remedial measures**

No		inspection	Officer	component of Dam	deficiencies noticed	suggested
1	2	3	4	5	6	7
(b) **EXECUTIVE ENGINEER, MALEGAON IRRIGATION DIVISION, MALEGAON**						
3	Name :- **JAMLEVANI** Year of Completion: 1999 Location : Longitude: 73^0 49'47" Latitude: 20^0 26' 40" Height: 27.63 m Gross capacity:1.66 Mm3/sec Spillway capacity:-340.37cumecs Sr.No.in National Register of Large Dams : MH09MH1507	24/05/2021 20/12/2021	Shri S.P.Pawar E.E.M.I.D. Malegaon	Earth Dam.	Crest profile &slope of dam is not as per design.**(B1)**	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3.Checking of crest profile is essential to identify the excessive/uneven settlement of the dam. 4.Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 5.A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority.
					Abnormal leakage through rock toe.**(B3)**	1.Exact causes of leakages should be investigated &treated accordingly.
				Outlet	Outlet gate not open and close smoothly, some noise is there. **(B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organization
				Waste weir bar &Tail channel	Junction between spillway bar & embankment is not intact. Leakage observed through masonry wall. **(A3)**	1.Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the leakage so that its progression can be monitored if necessary. 2.Always measure the leakage and flow rate with respect to reservoir water level on a

						regular and frequent Basis 3.Theleakage should be checked for turbidity which would show the presence of soil in the water. 4.Search for opening on the upstream side and plug it if possible. 5.Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik
					Scouring is noticed at D/S side in tail channel **(A7)**	1.The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks . 2. Dam owner should identify the cause of retrogression/scouring 3.Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4.If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
4	Name:**SHINDE** Year of Completion: 1984 Location: Longitude: :74^{0}18'00" Latitude: 20^{0} 21' 40" Height: 21.26 m Gross capacity:1.690 Mm3 Spillway capacity: 80.00 cumecs Sr.No.in National Register of Large Dams: MH09MH0951	24/05/2021 20/12/2021	Shri. S.P.Pawar E.E.M.I.D. Malegaon	Outlet	Leakage through conduit is observed. about 100 LPM.**(A4)**	1.Determine the extent, severity, and cause of theleakage. Measure and photograph any damage caused by the leakage so that its progression can be monitored if necessary. 2.Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis 3.Theleakage should be checked for turbidity which would show the presence of soil in the water. 4.Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 5.Necessary repairs should be carried out.
					Outlet well is not in good condition.**(A6)**	1.Outlet well should be surged and repaired to restore original working capacity of the well, with prior approval from competent authority .
				Waste weir bar & tail channel.	Outlet gate not open close smoothly, 0.50 cusec leakage observed through the gate.**(B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation.
					Leakage through foundation of WW bar.(2 to 3 Cusecs).**(B7)**	1.Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level. 2.Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission

						3. Necessary repairs should be carried out
					Scouring on D/S of ww bar**.(A7)**	1.The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2.Dam owner should identify the cause of scouring 3.Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4.If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik
5	Name: **BHADANE** Year of Completion: 1984 Location: Longitude: 73^0 30' 00" Latitude: 20^0 34' 00" Height: 16.20 m Gross capacity:1.520 Mm3 Spillway capacity: 101.0cumecs Sr.No.in National Register of Large Dams: MH09MH0957	24/05/2021 20/12/2021	Shri. S.P.Pawar E.E.M.I.D Malegaon	Outlet	Outlet gate not open close smoothly. Stem rod of well is bent. **(B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation.
					Leakage through gate & H.R well.**(A4)**	1.Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the leakage so that its progression can be monitored if necessary. 2.Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis 3.Theleakage should be checked for turbidity which would show the presence of soil in the water. 4.Search for opening on the upstream side and plug it if possible. 5.Necessary repairs should be carried .
					Leakage through well masonry is observed. **(A6)**	1.Outlet well should be repaired to restore original working capacity of the well.
				W.W.& T.C.	EDA is not in good condition. **(A14)**	1.Location, type, and extent of the deterioration of the EDA should be identified and photographed 2.Structural damages including misalignment,

						settlement, vertical and horizontal displacement should be checked 3.Survey or surface mapping to document all problems in the structure and their characteristics should be done thoroughly 4.Necessary repairs should be carried out in accordance with approved drawing with prior approval from competent technical authority. 5.If deterioration is extensive, repairs to the EDA, should be done in consultation with Central Design Organisation, Nasik
					Scouring is noticed at D/S of waste weir bar @ 60 m. **(A7)** Leakage through foundation rock.**(B7)**	1.The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2.Dam owner should identify the cause of scouring 3.Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4.If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik 5.Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level. 6.Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 7.Location, type, and extent of the damages of the spillway bar should be identified and photographed

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
6	Name :-**TALWADE BHAMER** Year of Completion: 1979 Location : Longitude: 74^0 18'00" Latitude: 20^0 48' 00" Height: 15.45 m Gross capacity:2.560 Mm3/sec Spillway capacity:-265.33 cumecs Sr.No.in National Register of Large Dams :- MH09MH0776	24/05/2021 25/12/2021	Shri. S.P.Pawar E.E.M.I.D. Malegaon	Earth Dam	Dam section is not as per design. Top width is less than design**(B1)** Pitching is disturbed.**(B3)**	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Necessary repairs should be carried out.
				Outlet	Outlet gate is not in working condition.(**B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation.
					Well and approach channel is completely silted.**(A6)**	1.Outlet well should be surged and cleaned to restore original working capacity of the well.
					Outlet well damaged & silted. **(B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation.
				WW. Bar & Tail Channel	Right side UCR masonry having length 1.20 m. &width 0.80 m. is broken. Coping over spillway bar is damaged.**(B7)**	1.Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level 2.Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3.Location, type, and extent of the damages of the spillway bar should be identified and photographed 4. Necessary repairs should be carried out in accordance with approved drawings.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
(c)EXECUTIVE ENGINEER, A'NAGAR IRRIGATION DIVISION, AHMADNAGAR						
7	Name:-**AMBIT** Year of Completion:- 2003 Location Longitude:73^0 47' 30" Latitude: 19^0 36' 30" Height: 24.00m Gross capacity:5.86Mm3 Spillway capacity:952.0 cumecs Sr.No.in National Register of Large Dams:- MH09MH1943	17/05/2021 09/12/2021	Shri. S.P.Pawar E.E.A.I.D. A'Nagar	Outlet	Rubber seal shows the sign of weathering.**(B12)**	1. It may be repaired in consultation with the of Mechanical Organisation .
				W.W.&T.C.	22 panel of size 7x 5 m are washed away with anchor bar & exposed rock are open in stilling basin.**(A14)** Flow condition of EDA have tendency to draw material.**(A14)**	1.Location, type, and extent of the deterioration of the EDA should be identified and photographed 2.Structural damages including misalignment, settlement, vertical and horizontal displacement should be checked 3.Survey or surface mapping to document all problems in the structure and their characteristics should be done thoroughly 4.Necessary repairs should be carried out in accordance with approved drawing. 5.If deterioration is extensive, repairs to the EDA, should be done in consultation with Central Design Organisation, Nasik
				Access Road	WBM road is slightly damaged.**(B6)**	1. Access road should be provided, repaired and maintained properly.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
8	Name:-**AMBIKHALSA** Year of Completion:-1975 Location Longitude:74^{0}10'00" Latitude: 19^{0}20' 34" Height: 15.32 m Gross capacity:1.74 Mm3 Spillway capacity:193.94 cumecs Sr.No.in National Register of Large Dams:- MH09MH512	03/05/2021 28/11/2021	Shri. S.P.Pawar E.E.A.I.D. A'Nagar	Earthen Embankment	Standing pool of water is noticed in nalla portion.(**A2)**	1.The cause of ponding should be identified. Confirm whether this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 2.Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
				Outlet.	Outlet well is not in good condition**.(B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation.
					Complete gate assembly have to be repaired**. (B5)**	
				WW & TC	Coping is not in good condition**.(B7)**	1.Location, type, and extent of the damages of the spillway bar should be identified and photographed. 3.Necessary repairs should be carried out in accordance with approved drawing.
				General	Severe leakage through dam & COT**.(A1)**	1.Determine the extent, severity, and cause of the seepage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 2.Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 3.The seepage should be checked for turbidity which would show the presence of soil in the water. 4.Search for opening on the upstream side and plug it if possible. 5.Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 6.Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.

9	Name:- **Ghodambe** Year of Completion:-1990 Location Longitude:73^{0}75'00" Latitude: 20^{0}30' 00" Height: 18.26 m Gross capacity:2.22 Mm3 Spillway capacity: cumecs Sr.No.in National Register of Large Dams:- MH09MH612	03/05/2021 28/11/2021	Shri. S.P.Pawar E.E.A.I.D. A'Nagar	Earthen Embankment	Crest profile is not as per design.(**B1)**	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3.Checking of crest profile is essential to identify the excessive/uneven settlement of the dam. 4.Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 5.A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority
				Outlet.	Outlet gate does not open close smoothly.(**B5)**	1.Necessary repairs should be carried out with the help of Mechanical Organisation.
				WW & TC	Coping is not in good condition**.(B7)**	1.Location, type, and extent of the damages of the spillway bar should be identified and photographed. 2.Necessary repairs should be carried out in accordance with approved drawing.

					Scouring on D/S of ww bar.(**A7)**	1.The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2.Dam owner should identify the cause of retrogression/scouring 3.Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4.If scouring is extensive, retrogression / scouring protection work should be done in consultation with Central Design Organisation, Nasik
				General	Severe leakage through dam & COT.(**A1)**	1.Determine the extent, severity, and cause of the seepage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 2.Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 3.The seepage should be checked for turbidity which would show the presence of soil in the water. 4.Search for opening on the upstream side and plug it if possible. 5.Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 6.Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.

[B] CHIEF ENGINEER, KONKAN REGION , MUMBAI **(1)SUPERINTENDING ENGINEER , THANE IRRIGATION CIRLE , KALAWA ,THANE** **(a)EXECUTIVE ENGINEER, MINOR IRRIGATION DIVISION, NASHIK**						
10	Name **: Aad** Year of Completion: 1997 Location: Longitude: 73^{0}36'00" Latitude: 20^{0}10' 00" Height: 23.80 m Gross capacity: 1.653 Mm3 Spillway capacity:70.07 cumecs Sr.No.in National Register of Large Dams :-MH09MH1419	04/05/2021 04/12/2021	Shri. S.R.Patil, EE, MID, Nashik	EE	The leakage is observed near and around the earthwork and head wall in d/s side **.(A4)**	1.Determine the extent, severity, and cause of the leakage.Measure and photograph any damage caused by the leakageso that its progression can be monitored if necessary. 3.Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis 4.Theleakage should be checked for turbidity which would show the presence of soil in the water. 5.Search for opening on the upstream side and plug it if possible. 6.Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 7.Necessary repairs should becarried out.

[C] CHIEF ENGINEER ,TIDC ,JALGAON						
(1)SUPERINTENDING ENGINEER&ADMINISTRATOR, C.A.D.A., JALGAON **(a)EXECUTIVE ENGINEER , DHULE IRRIGATION DIVISION,DHULE**						
11	Name: **MUKT**I Year of Completion: 1873 Location : Longitude: 74^0 53' 00" Latitude: 21^0 44' 00" Height: 21.20m Gross capacity:9.90 Mm3 Spillway capacity:548.0 cumecs Sr.No.in National Register of Large Dams:- MH09MH0009	17/04/2021 24/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Dam section is under section in gorge. Leakage is noticed on d/s of slope.(**B3**)	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Necessary repairs should be carried out in accordance with approved drawing.
					Heavy undulations and heavy rain cuts are observed.(**B3)**	
					In gorge portion clear water leakages are observed. Standing pool of water on d/s of dam.(**A2)**	1. The cause of ponding should be identified. Confirm wheather this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen damsection leading to serious consequences if not attended immediately. 2. Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
				Outlet	Both emergency gates are not in working condition.(**B5)**	1 Necessary repairs should be carried out with the help of Mechanical Organisation.
				WW & TC	Leakages through waste weir bar noticed. **(B7**)	1. Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level. 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission. 3. Necessary repairs should be carried out.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
12	Name:-**KHAPERKHEDA** Year of Completion: 1976 Location : Longitude: 74o 40^0 12” Latitude: 20o 30^0 00^{00} Height: 18.30m Gross capacity:2.70 Mm3 Spillway capacity:424.0 cumecs Sr.No.in National Register of Large Dams: MH09MH0581	23/04/2021 27/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Section is not as per design Slope indicates concavity. Settlement of embankment. **(B1& B3)**	1.Detailed survey of the dam and dam section should be carried out. 2.Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3.Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4. Necessary repairs should be carried out .
					Leakage or oozing is noticed at d/s slope.(**A1)**	1. Determine the extent, severity, and cause of the boils, wet patches and leakages. Measure and photograph any damage caused by the boils, wet patches and leakages so that its progression can be monitored if necessary. 3. Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis 4. The leakage should be checked for turbidity which would show the presence of soil in the water. 5. Search for opening on the upstream side and plug it if possible. 6. Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 7. Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.
					Boils and wet patches noticed at d/s of embankment. Leakage through dyke**.(A1)**	
					Abnormal leakage through rock toe @ two places from dam body & side hill dyke**. (A1)**	
				Outlet	Leakage through conduit concrete & pipe joints.**(A4)**	1.Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the leakage so that its progression can be monitored if necessary. 2.Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis 3.Theleakage should be checked for turbidity which would show the presence of soil in the water. 4.Necessary repairs should be carried out,

13	Name:-**WAKWAD** Year of Completion: 1977 Location : Longitude: 74^0 46^0 00^{00} Latitude: 21^0 07^0 00^{00} Height: 28. 64m Gross capacity:2.910 Mm3 Spillway capacity:418.0 cumecs Sr.No.in National Register of Large Dams:- MH09MH0633	03/05/2020 24/10/2020	Shri N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Top width/S & D/S slope are not as per design. Crest profile is not at proper elevation. Settlement is observed**. (B1& B3)**	1 Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Checking of crest profile is essential to identify the excessive/uneven settlement of the dam. 4 Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 5. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority.
				Outlet	Leakage through gate from slot about 10-15 LPS**.(A4)**	1. Necessary repairs should be carried out in consultation with mechanical Organization.
				W.W & T C	Left side Flank wall between WW bar & embankment is collapsed**.(B7**)	1. Location, type, and extent of the damages of the spillway bar should be identified and photographed. 2. Necessary repairs should be carried out in accordance with approved drawing.
					About 20 m. portion of waste weir bar is collapsed**. (B7)**	

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
14	Name:-**NANDRE** Year of Completion: 1979 Location : Longitude: 74^0 25^0 45^{00} Latitude: 21^0 00^0 05^{00} Height: 17.37m Gross capacity:2.37 Mm3 Spillway capacity:382.0 cumecs Sr.No.in National Register of Large Dams:- MH09MH0778	18/04/2021 10/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Leakage through COT in gorge portion due to partial COT.**(A1)** Boils, wet patches on d/s of dam.**(A1)** Leakage through underground. Hence water is stored for one month only. **(A1)**	1. Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the leakage so that its progression can be monitored if necessary. 2. Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis 3. The leakage should be checked for turbidity which would show the presence of soil in the water. 4. Search for opening on the upstream side and plug it if possible. 5. Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 6. Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.
				Outlet	Outlet is not working condition since 13 years.(**B5)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
15	Name: **KHOLGHAR** Year of Completion: 1986 Location: Longitude: 74^0 49^0 00 ^{0} Latitude: 20^0 39^0 00^0 Height: 26.0 m Gross capacity:4.314 Mm3 Spillway capacity: 470.99 cumecs Sr.No.in National Register ofLargeDams: MH09MH1121	20/04/2021 16/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	General condition of dam is not satisfactory. Settlement of d/s slope. Dam section and dam top width is not as per design. Rock toe required repairs**.(B3 & B1)**	1 Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Checking of crest profile is essential to identify the excessive/uneven settlement of the dam. 4 Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 5. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority.
				Outlet	H.R. masonry of well is fully damaged. Outlet hoist not in proper line. Gate is in closed position.(**A18)**	1. It may be repaired in consultation with the of Mechanical Organisation .
					Piping is observed near junction. of conduit and earthwork**.(A4)**	1. Determine the extent, severity, and cause of the piping. Measure and photograph any damage caused by the piping so that its progression can be monitored if necessary. 2. Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.
				WW.&TC	Scouring at d/s and u/s of bar. Scouring observed in tail channel**.(A7)**	1. The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of

						scouring 3. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik
					EDA is totally collapsed/S guide wall washed away**.(A14)**	1. Location, type, and extent of the deterioration of the EDA should be identified and photographed 2. Structural damages including misalignment, settlement, vertical and horizontal displacement should be checked 3. Survey or surface mapping to document all problems in the structure and their characteristics should be done thoroughly 4. Necessary repairs should be carried out in accordance with approved drawing with prior approval from competent technical authority. 5. If deterioration is extensive, repairs to the EDA, should be done in consultation with Central Design Organisation, Nasik
					U/s & D/s face needs pointing. **(B7)**	1.Location, type, and extent of the damages of the spillway bar should be identified and photographed 2. Necessary repairs should be carried out in accordance with approved drawing .

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
16	Name: **DHANIBARA** Year of Completion: 1985 Location: Longitude: 74^0 48^0 00^0 Latitude: 21^0 02^0 00^{00} Height: 19.65m Gross capacity: 1.660Mm3 Spillway capacity: 418.8 cumecs Sr.No.in National Register of Large Dams:- MH09MH1085	20/04/2021 16/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Small leakage on d/s slope when dam is full. Dam top is settled. (**A1 & B3)**	1. Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 2. Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis 3. The leakage should be checked for turbidity which would show the presence of soil in the water. 4. Search for opening on the upstream side and plug it if possible. 5. Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 6. Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.
					Top width is not as per design**.(B1**)	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Necessary repairs should be carried out
				Outlet	Leakage observed through gate & head wall **(A4)** Heavy leakage through pipe conduit (**A4)** Outlet & earth work is not properly protected hence carries leakage. (**A4)**	1. Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 2. Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis 3. The leakage should be checked for turbidity which would show the presence of soil in the water. 4. Search for opening on the upstream side and plug it if possible. 5. Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 7. Necessary repairs should be carried.

					H.R well required to reconstruct.**(A6)** Leakages in outlet well.**(A6)**	1. Outlet well should be repaired to restore original working capacity of the well, with prior approval from competent authority .
				W.W&TC	WW bar is in damaged condition.(**B7)**	1. Location, type, and extent of the damages of the spillway bar should be identified and photographed. 2. Necessary repairs should be carried out in accordance with approved drawing.
					EDA required to reconstruct.(**A14)**	1. Location, type, and extent of the deterioration of the EDA should be identified and photographed 2. Structural damages including misalignment, settlement, vertical and horizontal displacement should be checked 3. Survey or surface mapping to document all problems in the structure and their characteristics should be done thoroughly 4. Necessary repairs should be carried out in accordance with approved drawing with prior approval from competent technical authority. 5. If deterioration is extensive, repairs to the EDA, should be done in consultation with Central Design Organization, Nasik

Sr. no	**Dam features**	**Date of inspection**	**Inspecting Officer**	**Main component of Dam**	**Observations / Significant deficiencies noticed**	**Remedial measures suggested**
1	**2**	**3**	**4**	**5**	**6**	**7**
17	Name**:KHANDLAY** Year of Completion: 1974 Location: Longitude: 74^0 25^0 45 ^{00} Latitude: 21^0 00^0 05 ^{00} Height: 21.90 m Gross capacity:1.593 Mm3 Spillway capacity: 413.00 cumecs Sr.No.in National Register of Large Dams: MH09MH0430	18/04/2021 10/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Section is not as per design**.(B1)** Concavity on u/s & d/s slope.Top width is less than 3.0 m. **(B1& B3)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Dam owner should figure out the cause of concavityand supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4. Necessary repairs should be carried.
					Standing pool on d/s**.(A2)**	1. The cause of ponding should be identified. Confirm whether this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to

						serious consequences if not attended immediately. 2. Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
				Outlet	Heavy crack from top to 3m. Downward to well. Leakage from well. (**A6)**	1. Outlet well should be surged and repaaired to restore original working capacity of the well, with prior approval from competent authority
					Leakage through gate**.(A4)**	1 Necessary repairs should be carried out in consultation with Mechanical Organisation.
					Two numbers of stem rod are bent. Outlet is not in good condition.(**B5**)	1. Necessary repairs should be carried out with the help of Mechanical Organisation.
					All weather approach road is not provided. (**B6)**	1. Access road should be provided, repaired and maintained properly.

Sr. no	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
18	Name:**KHOKASA** Year of Completion: 1995 Location: Longitude: 74^0 40^0 12 ^{00} Latitude: 21^0 34^0 00 ^{00} Height: 24.72 m Gross capacity:1.523 Mm3 Spillway capacity: 135.0 cumecs Sr.No.in National Register of Large Dams-: MH09MH1368	21/04/2021 16/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Embankment is under section. Some concavity in d/s slope. D/S slope is not as per design. (**B1 & B3)** Standing pool on d/s of dam.Clean water is flowing d/s of dam at chainage 160 m,240 m,330m(0.25 Cusecs @FSL) (**A2)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Dam owner should figure out the cause of concavity and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4.The cause of standing pool should be identified. Confirm wheather this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 5.Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
				Outlet	Leakage through gate (2 to 3 cusecs) (**A4)** Leakage through masonry of well & pipe joint.(**A4)** Leakage through conduit (2 To 3 Cusecs).Every day water level is reducing by 5 cm even the gate is in closed position.(**A4**)	1.Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the leakage so that its progression can be monitored if necessary. 2. Always measure the leakageand flow rate with respect to reservoir water level on a regular and frequent Basis 3. Necessary repairs should be carried out in consultation with mechanical Organisation.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
19	Name:**SHELBARI** Year of Completion: 1982 Location: Longitude: 74^0 08^0 30 ^{00} Latitude: 20^0 50^0 00 ^{00} Height: 20.70 m Gross capacity:1.589 Mm3 Spillway capacity: 403.0 cumecs Sr.No.in National Register of Large Dams: MH09MH0929	19/05/2021 22/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Leakage Or oozing on d/s slope of embankment.(**A3)**	1.Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the leakage so that its progression can be monitored if necessary. 2. Always measure the leakage and flow rate with respect to reservoir water level on a regular and frequent Basis. 3. The leakage should be checked for turbidity which would show the presence of soil in the water. 4. Search for opening on the upstream side and plug it if possible. 5. Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 6. Necessary repairs should be carried out.
				WW & TC	Leakage through foundation of masonry bar.(**B7)**	1. Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level. 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission. 3. Necessary repairs should be carried out.
20	Name:**CHHAWADI** Year of Completion: 1973 Location: Longitude: 74^0 31^0 00^{00} Latitude: 21^0 06^0 00^{00} Height: 17.20 m Gross capacity:4.420 Mm3 Spillway capacity: 1243.00 cumecs Sr.No.in National Register of Large Dams: MH09MH0383	17/04/2021 24/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Embankment is not in good condition Top width is less than 3.0 m. i.e. 1.5 m. to 2.5 m. (**B1,B3).** U/S &D/S slopes shows signs of slips, bulging or concavity.(**B3)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Dam owner should figure out the cause of slips bulging or concavityand supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4. Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.
				Outlet	Stem rod is not straight. **(B5)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.

				WW& TC	Masonry bar is not in good condition. Bar is broken.Leakage through masonry & foundation. (**B7)**	1. Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level. 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3. Location, type, and extent of the damages of the spillway bar should be identified and photographed 4. Necessary repairs should be carried out .

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
21	Name:**HALDANI** Year of Completion: 1989 Location: Longitude: 73^0 58' 00" Latitude: 21^0 09' 00" Height: 19.42 m Gross capacity:3.420 Mm3 Spillway capacity: 410.00 cumecs Sr.No.in National Register of Large Dams: MH09MH1231	21/04/2021 16/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	Earth Dam	Embankment settlement in Gorge by 0.6 m.Section is not as per design. Rain cuts noticed. **(B3)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Checking of crest profile is essential to identify the excessive/uneven settlement of the dam. 4 .Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 5. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority.
				Outlet	Head regulator is collapsed.(**A6)** Stem rod is not straight. **(B5)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.
				WW& TC	Scouring in tail channel, 4 m. to 5 m drop observed**.(A7)**	1. The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of retrogression/scouring 3. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done in consultation with CDO, Nasik.
					Waste weir bar is broken at places**.(B7)**	1 Location, type, and extent of the damages of the spillway bar should be identified and photographed. 2. Necessary repairs should be carried out

22	Name:**GADHAD-DEO** Year of Completion: 1998 Location: Longitude: 74^0 50' 30" Latitude: 21^0 36' 30" Height: 22.80 m Gross capacity:1.73 Mm3 Spillway capacity: 230.80 cumecs Sr.No.in National Register of Large Dams: MH09MH1468	14/05/2021 17/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	EE	General condition of dam is not good.The crest profile is not at proper elevation.Top width,u/s & d/s slope is not as per design.(**B1, B3**)	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 5. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority.
				Outlet	Leakage through gate.(10c to 15 LPS.(**B12)**	1. It may be repaired in consultation with the of Mechanical Organisation .
					Gate surface is deteriorated.(**B11)**	1. It may be repaired in consultation with the of Mechanical Organisation .
					Rubber seal is damaged**.(B12)**	1.It may be repaired in consultation with the of Mechanical Organisation .
				WW& TC	Leakage through masonry of WW bar.(10 to 20 LPS) Left side wall between WW bar & embankment is collapsed.(**B7)**	1. Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level. 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3. Location, type, and extent of the damages of the spillway bar should be identified and photographed 4. Necessary repairs should be carried out in accordance with approved drawing.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
23	Name: **VIRKHEL** Year of Completion: 1977 Location: Longitude: 74^0 49' 00" Latitude: 20^0 39' 00" Height: 15.5 m Gross capacity:0.8 Mm3 Spillway capacity: 286.00 cumecs Sr.No.in National Register of Large Dams:MH09MH0419	19/05/2021 22/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	EE	Top width is short in all length of dam**.(B1)** Abnormal leakages through rock toe.**(A1)** Leakage through COT is observed**.(A1)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3.Determine the extent, severity, and cause of the seepage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 4.Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 5.The seepage should be checked for turbidity which would show the presence of soil in the water. 6.Search for opening on the upstream side and plug it if possible. 7. Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 8.Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.
				WW & TC	Scouring on d/s side of bar.(**A7)**	1. The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of retrogression/scouring 3. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done

					Coping over spillway bar is not in good condition**.(B7)**	1. Location, type, and extent of the damages of the spillway bar should be identified and photographed 2. Necessary repairs should be carried out.
24	Name: **SHEWADE** Year of Completion: 1980 Location: Longitude: 74^0 36^0 00^{00} Latitude: 21^0 10^0 00^{00} Height: 10.5 m Gross capacity:1.156 Mm3 Spillway capacity: 230.00 cumecs Sr.No.in National Register of Large Dams:MH09MH0829	17/04/2021 24/11/2021	Shri. N.M.Vatte E.E.D.I.D. Dhule	EE	From chainage 510m to 780m.U/S slope of dam is slip from top of dam.(**B3)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain the slip earthen embankment. 3. Dam owner should figure out the cause of slip and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority.
				WW & TC	Leakage through COT**. (A1)**	1.Determine the extent, severity, and cause of the seepage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 2.Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 3.The seepage should be checked for turbidity which would show the presence of soil in the water. 4.Search for opening on the upstream side and plug it if possible. 5. Reservoir level may need to be lowered if saturated areas increase in size at a fixed storage level or if flow increases. 6.Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
(b)EXECUTIVE ENGINEER, JALGAON IRRIGATION DIVISION, JALGAON						
25	Name: **AGNAWATI** Year of Completion:1989 Location: Longitude:75^0 13'00" Latitude: 20^0 29' 00" Height: 14.83 m Gross capacity:3.00 Mm3 Spillway capacity:952.0 cumecs Sr.No.in National Register of Large Dams: MH09MH1225	24/05/2021 21/12/2021	Shri.L.M. Shinde E.E.J.I.D. Jalgaon	Earth Dam	Dam section is not as per design. Rain cuts are observed. Pitching is disturbed at some places. (**B1 & B3)** Standing pool observed at 60 m from d/s toe of dam between ch.1700 to 1750m.(**A2)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. The cause of standing pool should be identified. Confirm wheather this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 4. Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant
				Outlet	Gate does not open close smoothly. **(B5)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.
					Rubber seal is damaged. (**B12)**	1. It may be repaired in consultation with the of Mechanical Organisation .
				WW&TC	Scouring in bottom of EDA & d/s of end wall.(**A7)**	1. The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of retrogression/scouring 3. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik
					Leakage through right side flank wall **(B7)**	1. Source of leakage should be identified chainage wise along the length of flank wall and leakages should be quantified with respect to reservoir water level. 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3. Necessary repairs should be carried out.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
(c)EXECUTIVE ENGINEER, GIRNA IRRIGATION DIVISION, JALGAON						
26	Name:**KRUSHNAPURI** Year of Completion:1987 Location: Longitude: 75^0 04' 00" Latitude: 20^0 56' 00" Height: 14.15 m Gross capacity:2.176 Mm3 Spillway capacity:595.0 cumecs Sr.No.in National Register of Large Dams:-MH09LH1166	22/05/2021 07/11/2021	Shri. D.P.Argrawal E.E.G.I.D. Jalgaon	Outlet	Leakage observed through junction of pipe.(**A4)**	1. Determine the extent, severity, and cause of the leakage. Measure and photograph any damage caused by the leakage so that its progression can be monitored if necessary. 2. Necessary repairs should be carried out .
				W.W&TC	Leakage through WW bar**.(B7)**	1. Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level. 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3. Necessary repairs should be carried out .
					Scouring on d/s of bar**.(A7)**	1.The extent and location of such scouring with reference to the various components of dam, spillway, outlet,etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of retrogression/scouring 3. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done .

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
27	Name: **RAJDHERE** Year of Completion:1981 Location: Longitude: 74^0 52' 00" Latitude: 20^0 18' 00" Height: 17.05 m Gross capacity:1.94Mm3 Spillway capacity:312.62 cumecs Sr.No.in National Register of Large Dams:-MH09MH0874	25/05/2021 07/11/2021	Shri. D.P.Argrawal E.E.G.I.D. Jalgaon	EE	Standing pool of water observed in nalla portion of d/s of dam**.(A2)** Water logging in nalla portion of d/s of dam.(**A2)**	1. The cause of ponding should be identified. Confirm whether this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 2. Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
				Outlet	Gate does not open close smoothly. (**B5)** Stem Rob is bent. (**B5)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.
					Scouring on d/s side of bar**(A7)**coping is necessary at d/s of ww bar.(**B7)**	1.The extent and location of such scouring with reference to the various components of dam, spillway, outlet,etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of retrogression/scouring 3. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done . 5. Location, type, and extent of the damages of the spillway bar should be identified and photographed. 6. Necessary repairs should be carried out.
					Leakage through COT**.(A1)**	1. Determine the extent, severity, and cause of the seepage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 2. Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 3. The seepage should be checked for turbidity which would show the presence of soil in the water. 4. Search for opening on the upstream side and plug it if possible. 5. Reservoir level may need to be lowered if saturated areas

						increase in size at a fixed storage level or if flow increases. 6. Necessary repairs should be carried out in consultation with Central Design Organisation, Nasik.

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
(d) EXECUTIVE ENGINEER, MINOR IRRIGATION DIVISION, JALGAON						
28	Name:**SUR** Year of Completion:1994 Location: Longitude:75^0 06' 00" Latitude: 21^0 21' 00" Height: 17.93 m Gross capacity:2.392 Mm3 Spillway capacity:380.0 cumecs Sr.No.in National Register of Large Dams: MH09MH1328	18/05/2021 28/11/2021	Shri. V.T.Thakare E.E.M.I.D. Jalgaon	EE	Differences observed in profile elevation and undulation is observed. Settlement of embankment. (**B3)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3 .Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority
					Standing pool are observed at chainage 20 m to 90 m and d/s of earthen dam.(**A2)**	1. The cause of ponding should be identified. Confirm whether this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 2. Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
				Outlet	Right side of outlet gate is damaged.(**B5)** Leakage through outlet gate up to 1 to 2 cusecs is noticed**.(A4)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.

				WW. & T.C.	Leakages from masonry of spillway bar are noticed. Leakage is observed from both side flank wall.(**A15)** Scouring in tail channel on D/S of ww bar.(**A7)**	1. Determine the extent, severity, and cause of the seepage. Measure and photograph any damage caused by the seepage so that its progression can be monitored if necessary. 2. Always measure the seepage and flow rate with respect to reservoir water level on a regular and frequent Basis 3. Necessary repairs should be carried out 4. The extent and location of such scouring with reference to the various components of dam, spillway, outlet, etc. should be identified with the respect to the levels and contour plans and reference marks 5. Dam owner should identify the cause of scouring. 6. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 7. If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
[D] CHIEF ENGINEER, SPECIAL PROJECT, PUNE						
(1)SUPERINTENDING ENGINEER KUKADI IRRIGATION CIRCLE, PUNE						
(a) EXECUTIVE ENGINEER, KUKADI IRRIGATION DIVISION NO.2, SHRIGONDA						
29	Name:**TELENGHASHI** Year of Completion:1975 Location : Longitude:75^0 26'00" Latitude: 18^0 20' 00" Height: 17.12 m Gross capacity: 1.070 Mm3 Spillway capacity:218.40 cumecs Sr.No.in National Register of Large Dams: MH09MH0486	Not Mentioned	Shri.S.V. Kale E.E.K.I.D.2 Shrigonda	Outlet	Repairs to outlet well masonry & cleaning of well is required**.(A6)**	1.Outlet well should be surged and repaired to restore original working capacity of the well, with prior approval from competent authority
				WW&TC	Heavy leakage through masonry. Major repairs are required**.(B7)**	1. Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3. Location, type, and extent of the damages of the waste weir should be identified and photographed 4. Necessary repairs should be carried out in accordance with approved drawing .
					Damages to concrete in bucket.(**A14**)	1. Location, type, and extent of the deterioration of the EDA should be identified and photographed 2. Structural damages including misalignment, settlement, vertical and horizontal displacement should be checked 3. Survey or surface mapping to document all problems in the structure and their characteristics should be done thoroughly 4. Necessary repairs should be carried out in accordance with approved drawing with prior approval from competent technical authority. 5. If deterioration is extensive, repairs to the EDA, should be done in consultation with Central Design Organisation, Nasik
					Scouring on d/s at chainage 70 m to 80 m**.(A7)**	1. The extent and location of such scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of scouring 3. Necessary scouring protection work should be carried

						out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
30	Name:**NAIGAON** Year of Completion:1978 Location : Longitude:75^0 24' 00" Latitude: 18^0 19' 00" Height: 15.96 m Gross capacity: 2.368 Mm3 Spillway capacity: 756.24 cumecs Sr.No.in National Register of Large Dams: MH09MH728	Not Mentioned 19/11/2021	Shri.S.V. Kale E.E.K.I.D.2 Shrigonda	EE	Undulation is observed. Growth of vegetation is seen. Normal cracks are noticed. **(B3,B4)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority. 5. Necessary repairs should be carried out.
				Outlet	Gate is not functioning since last 25 Years. **(B5)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.
					Repairs of well masonry & cleaning of well is necessary.(**B5)**	1. Necessary repairs should be carried out with the help of Mechanical Organisation.
				WW&TC	Heavy leakages in spillway bar.(**B7)**	1. Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level. 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission. 3.Necessary repairs should be carried out.
					Coping of bar is not in good condition**.(B7**)	1. Location, type, and extent of the damages of the waste weir should be identified and photographed. 2. Necessary repairs should be carried out in accordance with approved drawing .
					Scouring on d/s of bar**.(A7)** Retrogression in tail channel**.(A7)**	1. The extent and location of such retrogression/scouring with reference to the various components of dam, spillway, outlet, power house etc. should be identified with the respect

						to the levels and contour plans and reference marks 2. Dam owner should identify the cause of retrogression/scouring 3. Necessary retrogression / scouring protection work should be carried out with prior approval from competent technical authority. 4. If retrogression / scouring is extensive, retrogression / scouring protection work should be done in consultation with Central Design Organisation, Nasik
					Guide bund of end portion is washed out. **(A16)**	1. Location, type, and extent of the damages of the guide bund should be identified and photographed. 2. Necessary repairs should be carried out in accordance with approved drawing .

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
31	Name: **Chichondipatil** Year of Completion:1977 Location : Longitude:74^0 35' 00" Latitude: 19^0 20' 00" Height: 15.96 m Gross capacity: 2.80 Mm3	Not Mentioned 19/11/2021	Shri.S.V. Kale E.E.K.I.D.2 Shrigonda	EE	Standing pool are observed at chainage 20 m to 90 m and d/s of earthen dam.(**A2)**	1. The cause of ponding should be identified. Confirm whether this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 2. Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
					Some undulation is observed. Some settlement is observed in gorge portion.(**B3)** Embankment level is below 1.0 m of TBL. **(B3)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority. 5.Necessary repairs should be carried out in accordance with approved drawing .
				WW&TC	Scouring on d/s of bar.(**A7)**	1. The extent and location of such scouring with reference to the various components of dam, spillway, outlet, etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of scouring 3. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik
32	Name: **Ghodegaon** Year of Completion:1975 Location :	25/05/2021 20/11/2021	Shri.S.V. Kale E.E.K.I.D.2	EE	Local depression and settlement in gorge portion. Section is not as per design. (**B3 & B1)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be

	Longitude:74^0 35' 00" Latitude: 19^0 20' 00" Height: 16.36 m Gross capacity: 2.99 Mm3		Shrigonda			checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 3. Dam owner should figure out the cause of low area and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 4. A uniform crest elevation may be re-established over the crest length by placing proper filler material in the low area in accordance with relevant IS codes with prior approval from competent technical authority. 5. Necessary repairs should be carried out.
				WW&TC	Scouring is noticed in tail channel. Retrogression 10 m from ww bar.**(A7)**	1. The extent and location of such scouring with reference to the various components of dam, spillway, outlet, etc. should be identified with the respect to the levels and contour plans and reference marks 2. Dam owner should identify the cause of scouring 3. Necessary scouring protection work should be carried out with prior approval from competent technical authority. 4. If scouring is extensive, scouring protection work should be done in consultation with Central Design Organisation, Nasik

Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
33	Name: **Ratnapur** Year of Completion:1985 Location : Longitude:75^0 17' 00" Latitude: 18^0 42' 00" Height: 16.41 m	Not Mentioned 13/11/2021	Shri.S.V. Kale E.E.K.I.D.2 Shrigonda	EE	Standing pool are observed at chainage 20 m to 90 m and d/s of earthen dam.(**A2)**	1. The cause of ponding should be identified. Confirm whether this water is coming from reservoir through seepage or may be from toe drain. This stagnant water in toe drain may lead to building of pore pressure in the earthen dam section leading to serious consequences if not attended immediately. 2. Necessary arrangements should be made like removing any obstacles or techno economical nalla regradation etc. so that water will not get stagnant.
					Some undulation is observed in gorge portion.(**B1)** Settlement of rock toe , abnormal leakage through rock toe . **(B3)**	1. Detailed survey of the dam and dam section should be carried out. 2. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. 4 .Dam owner should figure out the cause of abnormal leakage through rock toe and supervise all steps necessary to reduce the threat to the dam and to correct the condition. 5. Necessary repairs should be carried out.

				Outlet	Outlet gate needs cleaning**. (A6**)	1. Outlet well should be cleaned to restore original working capacity of the well.
				WW&TC	Heavy leakage through ww bar.(**A7)**	1. Source of leakage should be identified chainage wise along the length of waste weir bar and leakages should be quantified with respect to reservoir water level 2. Investigations for seepage should be carried out as per relevant provisions mentioned in para5.2.2.2 Investigations for seepage of Manual for Rehabilitation of Large Dams (Page 47 of 112) published by Central Water Commission 3. Location, type, and extent of the damages of the waste weir should be identified and photographed 4. Necessary repairs should be carried out in accordance with approved drawing .

Table 3.15

Class-II Dams with Category-3 Deficiency

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
	[A] CHIEF ENGINEER, NMR, NASHIK **(1) SUPERINTENDING ENGINEER & ADMINISTRATOR, CADA, NASHIK** **(a) EXECUTIVE ENGINEER, NASHIK IRRIGATION DIVISION, NASHIK**										
1	Alandi	1983	73°42□ 00□□ 20° 07□ 00□□	29.28	29.53	1019.00	MH09MH1003	Ungated	02/05/2021 01/12/2021	3.22, 3.20, 3.21,	03
2	Amboli	1978	73°29□ 00□□ 19° 59□ 00□□	17.00	3.660	106.47	MH09MH0549	Ungated	25/05/2021 13/12/2021	3.5,3.1,3.7, 3.18, 3.9	05
3	Anjneri	2006	73°35□ 40□□ 1456□ 00□□	28.14	3.242	100.45	MH09HH1804	Ungated	25/05/2021 13/12/2021	3.5,3.7,3.2,3.9,3.34,3.20,3.32	07
4	Dhaur	1993	73°40□ 00□□ 20° 12□ 00□□	16.07	1.18	54.38	MH09MH1301	Ungated	02/05/2021 04/12/2021 **24/12/2021**	3.7,3.9,3.22,3.34,3.20,3.28,3.30,	07
5	Eklahare	1984	73°47□ 00□□ 20° 22□ 00□□	17.40	3.54	187.99	MH09MH1035	Ungated	02/05/2021 04/12/2021	3.4,3.30, 3.7, 3.9, 3.34, 3.20, 3.16,3.6,	08
6	Karanjalipada	1986	74°35□ 00□□ 20° 16□ 00□□	15.50	1.867	89.18	MH09MH1108	Ungated	02/05/2021 04/12/2021	3.5,3.7,3.9,3.2,3.13,3.20,3.16, 3.30,3.6	09
7	Khed	1990	73°42□ 50□□ 19° 37□ 05□□	19.01	3.800	216.00	MH09MH1237	Ungated	27/05/2021 14/12/2021	3.4,3.7,3.1,3.9,3.2,3.13,3.25,3.22,3.20,3.6	10
8	Kone	1985	73°32□ 00□□ 20° 04□	12.50	2.109	278.24	MH09MH0870	Ungated	25/05/2021 13/12/2021	3.5,3.7,3.1,3.2,3.9,3.34	06

			00□□								
9	Khadakjamb	1973	74°14'00□□ 20 ° 14'00"	16.44	0.510	96.26	MH09MH0337	Ungated	01/05/2021 11/12/2021	3.16,3.32,3.19,3.33,3.20,3.6	06
10	Kawadasar	1995	74°14□ 00□□ 20° 07□ 00□□	17.00	1.680	57.99	MH09MH1018	Ungated	02/05/2021 04/12/2021	3.7,3.9,3.13,3.22,3.34,3.21,3.20, 3.30,3.6	09

Sr.No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
11	Nalegaon	1995	73°42□ 50□□ 19° 37□ 05□□	20.24	2.260	72.04	MH09MH1221	Ungated	02/05/2021 05/12/2021 **24/12/2021**	3.5,3.7,3.9,3.13,3.22,3.34,3.20, 3.16,3.30	09
12	Pimpalnare	1981	73°35□ 00□□ 20° 18□ 00□□	17.73	2.250	95.69	MH09MH0849	Ungated	02/05/2021 05/12/2021 **24/12/2021**	3.5,3.7,3.9,3.13,3.22,3.34,3.16, 3.20,3.30	09
13	Ramshej	1974	73°48□ 00□□ 20° 06□ 00□□	17.09	1.69	130.48	MH09MH0329	Ungated	02/05/2021 05/12/2021 **24/12/2021**	3.5,3.7,3.9,3.13,3.34,3.21,3.20, 3.16,3.30,3.6	10
14	Talegaon Trimbak	1997	73°37□ 00□□ 19° 40□ 00□□	18.00	4.250	216.32	MH09MH1431	Ungated	25/05/2021 13/12/2021	3.5,3.9,3.2,3.34,3.20,3.6,3.30	07
15	Taloshi	1992	73°37□ 00□□ 19° 40□ 00□□	20.78	1.398	138.00	MH09MH1264	Ungated	27/05/2021 13/12/2021	3.5,3.7,3.1,3.2,3.9,3.22,3.34, 3.6	08
16	Tringalwadi	1980	73°35□ 00□□ 20° 06□ 00□□	15.77	3.110	206.68	MH09MH0686	Ungated	27/05/2021 14/12/2021	3.2,3.9,3.34,3.5,3.7,3.20,3.22,3.19,3. 1	09
17	Sadgaon Ladchi	1998	73°36□	25.65	5.89	158.87	MH09MH1467	Ungated	25/05/2021	3.7,3.3,3.2,3.9,3.1,3.13,3.23,3.34,3.3	12

			00□□ 20° 06□ 00□□						12/12/2021	2,3.22,3.16,3.6	
18	Rawalgaon	1997	73°42□ 00□□ 20° 05□ 51□□	17.71	1.331	58.00	MH09MH1418	Ungated	02/05/2021 05/12/2021	3.5,3.7,3.9,3.2,3.13,3.34,3.20,3.16,3.19,3.30,3.6	11
19	Dhagur	1993	73°40□ 00□□ 20° 10□ 00□□	19.57	1.183	51.39	MH09MH1944	Ungated	02/05/2021 05/12/2021	3.5,3.6,3.7,3.9,3.13,3.22,3.34,3.20,3.16,3.30	10
20	Konambe	1971	73°45□ 00□□ 19° 45□ 00□□	18.80	1.54	361.61	MH09MH0254	Ungated	13/05/2021 12/12/2021	3.5,3.4,3.7,3.1,3.9,3.2,3.13, ,3.22,3.34,3.16,3.32	11
21	Daraswadi	1970	74°11□ 30□□ 20° 13□ 00□□	15.52	3.058	875.00	MH09MH0221	Ungated	01/05/2021 11/12/2021	3.5,3.9,3.1,3.2,3.7,3.13,3.22,3.21,3.16,3.30	10
22	Shenwad	1994	73°36□ 00□□ 19° 41□ 00□□	17.90	2.906	68.19	MH09MH1322	Ungated	27/05/2021 14/12/2021	3.5,3.7, 3.9,3.20,3.23,3.21	06
23	Khadakozar	1963	73°40□ 00□□ 20° 12□ 00□□	21.57	8.429	1153.90	MH09MH0086	Ungated	01/05/2021 11/12/2021	3.5,3.7,3.9,3.2,3.13,3.22,3.16,3.19	08
24	Saradwadi	1987	73°55□ 00□□ 19° 55□ 14□□	12.52	2.18	544.80	MH09MH1125	Ungated	13/05/2021 12/12/2021 **10/01/2022**	3.5,3.4,3.1,3.7,3.9,3.13,3.20,3.22,3.34,3.16	10
25	Borkhind	1995	73°50□ 00□□ 19° 45□ 09□□	19.59	1.576	7.62	MH09MH1347	Ungated	13/05/2021 12/12/2021 **10/01/2022**	3.1,3.7,3.2,3.9,3.13,3.34,	06
Sr.No.	**Name of Dam**	**Year of Completion**	**Location**	**Height in meters**	**Gross Capacity (Mm3)**	**Design Spillway Capacity (Cumecs)**	**Sr No.of Large Dam in National Register**	**Gated/Ungated**	**Date of Inspection Pre & Post Monsoon**	**Deficiencies noticed**	**Total Deficiencies**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
26	Mahiravani	1984	73°39□ 00□□ 19°57□ 00□□	25.53	2.633	196.00	MH09MH683	Ungated	25/05/2021 13/12/2021 **10/01/2022**	3.5,3.2,3.9,3.34	04
27	Thangaon	1992	73°56□ 00□□ 19°42□ 00□□	18.71	1.424	345.00	MH09MH1220	Ungated	13/05/2021 12/12/2021	3.5,3.4,3.1,3.9,3.2,3.22,3.34,3.20	08

28	Umarale (Kh)	1989	73°47□ 00□□ 20°15□ 00□□	15.10	1.111	34.24	MH09LH1207	Ungated	02/05/2021 04/12/2021	3.5,3.7,3.9,3.13,3.22,3.34,3.21 ,3.16	08
29	Wadiwarhe	1983	73°39□ 00□□ 19°51□ 00□□	19.40	1.737	140.00	MH09MH0956	Ungated	27/05/2021 14/12/2021	3.5,3.7,3.1,3.2,3.9,3.34,3.20,3.19,3.6	09
	(b)EXECUTIVE ENGINEER PALKHED IRRIGATION DIVISION NASHIK										
30`	Jambutke	1973	74°10□ 00□□ 20° 19□ 00□□	18.27	2.520	834.88	MH09MH0415	Ungated	02/06/2021 28/01/2022	3.5, 3.7,3.2,3.21,3.22,3.20,3.30	07
31	Tisgaon	2000	73°57□ 30□□ 20° 15□ 10□□	24.90	15.14	1804.0	MH09MH1379	Ungated	02/06/2021 28/01/2022	3.7,3.2,3.9,3.13,3.22,3.21,3.20, 3.32,3.19,	09
32	Khadakmalegaon	1975	74°10□ 00□□ 20° 10□ 00□□	16.38	3.17	899.00	MH09MH0525	Ungated	05/11/2021 28/01/2022	3.9, 3.5,3.7,3.2,3.21,3.20,3.30	07
	(c)EXECUTIVE ENGINEER, MALEGAON IRRIGATION DIVISION, MALEGAON										
33	Bordaiwat	1976	73°26□ 00□□ 20°20□ 00□□	18.60	1.650	509.77	MH09MH0584	Ungated	24/05/2021 20/12/2021	3.5,3.7,3.2,3.9,3.34,3.20,3.16,3.19	08
34	Bori Ambedari	1985	73°20□ 00□□ 20°24□ 00□□	18.87	4.910	1515.00	MH09MH1102	Ungated	30/05/2021 24/12/2021	3.2,3.20,3.16,3.6	04
35	Dahikute	1974	74°36□ 00□□ 20°37□ 00□□	15.00	3.570	896.00	MH09MH0379	Ungated	30/05/2021 24/12/2021	3.5,3.7,3.9,3.2,3.22,3.21,3.20, 3.16,3.6	09
36	Dhardedigar	1979	72°55□ 00□□ 20°24□ 00□□	17.85	0.960	85.02	MH09MH0744	Ungated	24/05/2021 19/12/2021	3.5,3.2,3.9,3.21,3.20,3.31	06
37	Dunde	1986	74°19□ 30□□ 20°38□ 00□□	15.54	1.820	643.16	MH09MH1091	Ungated	29/05/2021 24/12/2021	3.5,3.7,3.1,3.9,3.2,3.22,3.34,3.20,3.1 6	09
38	Jakhod	1982	73°20□ 00□□ 20°40□ 00□□	24.23	2.34	235.00	MH09MH0922	Ungated	29/05/2021 25/12/2021	3.7,3.2,3.9, 3.20,3.16	05

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
39	Kasari-I	199	74°45□00□□ 20°13□ 00□□	14.71	1.58	451.00	MH09MH0856	Ungated	20/05/2021 30/12/2021 **11/01/2022**	3.7,3.1,3.9,3.2,3.6	05
40	Lohashingave	1973	74°35□00□□ 20°12□ 00□□	15.50	2.34	517.13	MH09MH0303	Ungated	20/05/2021 29/12/2021 **11/01/2022**	3.5,3.1,3.9,3.2,3.20,3.21	06
41	Malgaon chinchpada	1984	73°56□00□□ 20°20□ 00□□	23.39	2.82	188.00	MH09MH1034	Ungated	24/05/2021 19/12/2021	3.5,3.1,3.2,3.9,3.34,3.21,3.20,3.16	08
42	Mandwadwadi	1990	74°35'30□□ 20°00'15"	19.35	1.28	138.39	MH09MH1250	Ungated	20/05/2021 29/12/2021	3.34, 3.9,3.20	03
43	Markandpimpri	1993	72°55□00□□ 20°24□ 00□□	16.11	1.150	78.20	MH09MH1303	Ungated	24/05/2021 19/12/2021	3.5,3.9,3.34,3.21,3.20	05
44	Nagyasakya	1992	74°36□00□□ 20°02□ 00□□	23.09	15.620	51.550	MH09MH1282	Ungated	30/05/2021 29/12/2021	3.5,3.1,3.7,3.9,3.22,3.23,3.20,3.21,3.32,3.16	10
45	Pokhari	1985	74°15□15□□ 20°42□ 00□□	20.20	2.34	796.00	MH09MH1059	Ungated	20/05/2021 30/12/2021	3.7,3.1,3.2,3.9,	04
46	Rameshwar	1989	74°09□00□□ 20°36□ 00□□	17.00	2.02	462.00	MH09MH1240	Ungated	24/05/2021 19/12/2021	3.5,3.1,3.9,3.2,3.22,3.20	06
47	Rankheda	1979	74 ° 47□□00□□ 20 ° 20□□ 00□□	16.13	1.377	397.90	MH09MH0780	Ungated	20/05/2021 30/12/2021	3.7,3.9,3.2,3.20,3.21	05
48	Warshi	1974	74 ° 12□□00□□ 20 ° 38□□00□□	18.19	1.160	298.18	MH09MH0423	Ungated	24/05/2021 19/12/2021	3.1, 3.2,3.9,3.22,3.34,3.20	06
49	Gobapur	1976	73 ° 58□□00□□ 20 ° 26□□	25.38	2.25	441.00	MH09MH0583	Ungated	24/05/2021 19/12/2021	3.7,3.2,3.9,3.22,3.34,3.21,3.19	07

			00□□								
50	Sakur	1979	74 º 46□□ 00□□	10.52	1.91	240.00	MH09MH0760	Ungated	30/05/2021 24/12/2021	3.7,3.1,3.2,3.9,3.34,3.20,3.32, 3.16	08
			20 º 33□□ 00□□								
51	Pathave	1985	74 º 18□□ 00□□	18.35	1.870	235.00	MH09MH1043	Ungated	29/05/2021 25/12/2021	3.7,3.2,3.20	03
			20 º 40□□ 00□□								
52	Parsul	1884	74 º 19□□ 00□□	18.80	1.670	188.00	MH09MH0015	Ungated	30/05/2021 24/12/2021	3.5, 3.2, 3.9,3.7,3.22,3.6	06
			20 º 24□□ 00□□								

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
53	Khirad	1992	74 º 04□□ 00□□ 20 º 26□□ 00□□	19.99	1.400	123.44	MH09MH1284	Ungated	24/05/2021 20/12/2021	3.7,3.2,3.9,3.34,3.20,3.16	06
54	Bhalur	1983	74 º 34□□ 00□□ 20 º 14□□ 00□□	15.58	1.15	349.00	MH09MH0978	Ungated	20/05/2021 29/12/2021	3.5,3.9,3.2,3.34,3.21,3.20	06
55	Dhanoli	1995	73 º 46□□ 52□□ 20 º 34□□ 00□□	28.30	4.910	167.00	MH09MH1504	Ungated	24/05/2021 20/12/2021 **04/02/2022**	3.7,3.2,3.9,3.34,3.6	05
56	Jamlevani	1999	73 º 49□□ 47□□ 20 º 26□□ 40□□	27.63	1.66	340.37	MH09MH1507	Ungated	24/05/2021 20/12/2021	3.7,3.2,3.9,3.22,3.16,3.19	06
57	Talwade Bhamer	1979	74 º 18□□ 00□□ 20 º 48□□ 00□□	15.45	2.560	265.33	MH09MH0776	Ungated	29/05/2021 25/12/2021	3.5,3.2,3.9,3.34,3.21,3.20,3.16	07
58	Bhadane	1984	73 º 30□□ 00□□ 20 º 34□□ 00□□	16.20	1.520	101.00	MH09MH0957	Ungated	24/05/2021 20/12/2021	3.7,3.9,3.2,3.13,3.34,3.20,3.16	07
59	Ghodambe	1990	73 º 45□□ 00□□ 20 º 30□□ 00□□	18.56	2.20	431.00	MH09MH1239	Ungated	24/05/2021 20/12/2021	3.9,3.2,3.7,3.34,3.20,3.16,3.6	07
60	Shinde	1984	74 º 18□□ 00□□ 20 º 21□□ 40□□	21.26	1.690	80.00	MH09MH0951	Ungated	24/05/2021 20/12/2021	3.5,3.7,3.9,3.2,3.34,3.20,3.16	07
	(d)EXECUTIVE ENGINEER, AHAMADNAGAR IRRIGATION DIVISION, AHAMADNAGAR										
61	Ambhore	1981	75º00□ 00□□ 19º24□ 00□□	21.94	2.23	193.94	MH09MH109	Ungated	03/05/2021 28/11/2021 **14/03/2022**	3.2,3.13,3.17,3.20,3.7	05

62	Ambikhalsa	1975	74°10□00□□ 19°20□34□□	15.32	1.74	193.94	MH09MH512	Ungated	03/05/2021 28/11/2021	3.7,3.9,3.13,	03
63	Ambidumala	1993	73°07□00□□ 19°07□00□□	29.18	4.39	386.17	MH09MH1171	Ungated	03/05/2021 28/11/2021	3.7,3.9,3.13,3.20	04
64	Belapur Badgi	1973	75°20□00□□ 18°46□ 57□□	23.46	3.06	1087	MH09MH0998	Ungated	17/05/2021 27/11/2021	3.7,3.2,3.20,3.31	04
65	Bhalwani	1973	74°33'30" 19°06'40"	17.74	2.605	946.08	MH09MH0380	Ungated	14/05/2021 17/12/2021	3.10,3.2,3.9,3.13,3.35,3.6	06
66	Bori	1981	75°00'00" 19°24'00"	21.94	1.353	193.94	MH09MH0861	Ungated	17/05/2021 27/11/2021	3.7,3.20	02
67	Dhoki I	1981	74°25'00" 19°10'00"	17.33	1.266	1046.00	MH09MH0898	Ungated	14/05/2021 17/12/2021	3.10,3.9,3.2,,3.13,3.21,3.20	06

Sr. No.	**Name of Dam**	**Year of Completion**	**Location**	**Height in meters**	**Gross Capacity (Mm3)**	**Design Spillway Capacity (Cumecs)**	**Sr No.of Large Dam in National Register**	**Gated/Ungated**	**Date of Inspection Pre & Post Monsoon**	**Deficiencies noticed**	**Total Deficiencies**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
68	Kelewadi	1980	74°10'00" 19°14'00"	17.24	0.910	121.70	MH09MH0825	Ungated	03/05/2021 28/11/2021	3.7, 3.20, 3.9,3.13	04
69	Kuttarwadi	1991	74°14'00" 19°15'00"	15.52	1.812	550.00	MH09MH1276	Ungated	13/05/2021 31/12/2021	3.5,3.10,3.1,3.2,3.7,3.9,3.13,3.21, 3.20,3.16	10
70	Mandohal	1979	74°19'00" 19°12'00"	27.07	11.30	1420	MH09MH0800	Ungated	03/05/2021 17/12/2021	3.5,3.9,3.34,3.20	04
71	Sangavi	1994	74°14'00" 19°33'00"	18.58	2.02	660.44	MH09MH1333	Ungated	16/05/2021 09/12/2021 **08/02/2022**	3.2,3.13,3.20,3.16	04
72	Takalibhan	1977	74°47'00" 19°36'00"	16.60	5.490	0081.00	MH09MH0602	Ungated	10/05/2021 24/12/2021	3.5,3.7,3.1,3.9,3.13,3.22,3.34,3.21,3.33,3.28	10
73	Tikhol	1975	74°25'00" 19°40'00"	18.53	2.430	848.00	MH09MH0523	Ungated	14/05/2021 17/12/2021	3.2,3.9,3.34,3.21,3.20,3.6	06
74	Dhoki II	1981	74°25'00" 19°10'10"	18.53	2.430	848.00	MH09MH1945	Ungated	14/05/2021 17/12/2021	3.5,3.7,3.10,3.9,3.2,3.21,3.20,3.16,3.6	09
75	Waki	1992	73°44'04" 19°33'58"	29.83	3.19	750.00	MH09MH1403	Ungated	16/05/2021 27/11/2021 **08/02/2022**	3.13,3.1,3.22,3.34,3.20,3.31,3.16	07
76	Pargaon Ghatshil	1977	75°21'30" 19°12'00"	22.46	12.45	1467.00	MH09MH0653	Ungated	13/05/2021 31/12/2021	3.5.3.7.3.9.3.34.3.16	05
77	Ambit	2003	73°47□30□□ 19°36□	24.00	5.86	952.00	MH09MH1943	Ungated	17/05/2021 19/12/2021	3.20	01

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	[B] CHIEF ENGINEER, KONKAN REGION, MUMBAI **(1)SUPERINTENDING ENGINEER , THANE IRRIGATION CIRLE,THANE** **(a)EXECUTIVE ENGINEER MINOR IRRIGATION DIVISION , NASHIK**										
78	Cholmukh	2005	73°34□00□□ 20°08□ 00□□	23.44	3.486	103.60	MH09MH1634	Ungated	04/06/2021 04/12/2021 **07/01/2022**	3.7,3.9,3.2,3.13,3.22,3.20,3.16,3.6	08
79	Shinde	2002	73°35□30□□ 20°10□ 30□□	20.06	1.226	105.20	MH09MH1531	Ungated	04/05/2021 04/12/2021	3.1,3.7,3.9,3.2,3.13,3.16,3.28,3.34	08
80	Waigholpada	2001	73°30□30□□ 20°00□ 00□□	29.09	4.942	103.60	MH09MH1602	Ungated	30/04/2021 27/11/2021 **04/01/2022**	3.7,3.10,3.9,3.2,3.22,3.21,3.20 ,3.19	08

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
81	Lingawane	1987	73°35□00□□ 20°11□ 00□□	23.68	1.866	172.00	MH09MH1287	Ungated	04/05/2021 04/12/2021	3.5,3.1,3.7,3.9,3.2,3.13,3.28,3.6	08
82	Inambari	1976	73°35□00□□ 20°16□ 00□□	22.57	2.470	215.20	MH09MH0563	Ungated	04/05/2021 04/12/2021	3.7,3.1,3.2,3.13,3.22,3.34,3.19, 3.28,3.6	09
83	Ambai	2010	73°29□23□□ 19°57□ 30□□	23.51	2.177	119.00	MH09LH2039	Ungated	30/04/2021 27/11/2021	3.28, 3.7	02
84	Harangaon	1997	73°35□00□□ 20°18□ 00□□	28.30	5.143	119.56	MH09MH1426	Ungated	04/05/2021 04/12/2021	3.5,3.4,3.1,3.7,3.9,3.2,3.13,3.22, 3.20,3.6,3.28	11
85	Kachurli	2011	73°29□00□□ 19°57□ 00□□	28.24	2.113	43.75	MH09LH2040	Ungated	30/04/2021 27/11/2021	3.7,3.1,3.2,3.32,3.6,3.28	06
86	Chinchwad	1992	74°52□00□□ 19°49□ 00□□	21.30	2.02	183.32	MH09MH1287	Ungated	30/04/2021 27/11/2021	3.5,3.9,3.2,3.13,3.34,3.6,3.28,3.19	08
87	Jategaon	1984	73°31□00□□ 20°07□00□□	18.94	1.73	167.24	MH09MH1030	Ungated	30/04/2021 27/11/2021	3.7,3.9,3.2,3.22,3.34,3.5,3.20,3.28,3.6	09
88	Shirale	2010	73°30□05□□ 20°15□ 10□□	25.40	1.910	358.75	MH09LH2041	Ungated	30/04/2021 04/05/2021	3.1,3.2,3.9,3.13,3.28,3.6	06
89	Aad	1997	73°36□00□□ 20°10□ 00□□	23.80	1.653	70.07	MH09MH1419	Ungated	04/05/2021 04/12/2021	3.1,3.7,3.9,3.2,3.13,3.22,3.20,3.21,3.2 8	09
90	Bubali	1984	73°39□00□□ 20°21□ 00□□	20.00	1.634	322.96	MH09MH0976	Ungated	30/04/2021 11/12/2021	3.7,3.1,3.9,3.13,3.22,3.20,3.28	07
91	Roshani	2007	73°40□30□□ 20°31□ 00□□	29.67	5.796	719.68	MH09LH2038	Ungated	30/04/2021 27/11/2021 **04/01/2022**	3.7,3.1,3.2,3.9,3.13,3.22,3.16,3.19,3.6 ,3.28	10
92	Pahuchibari	1982	73°36□00□□ 20°22□	17.78	1.570	336.00	MH09MH0877	Ungated	04/05/2021 04/12/2021	3.5,3.4,3.7,3.9,3.2,3.28	06

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93	Ambad	2015	73°39□00□□ 20°22□ 00□□	26.95	4.825	258.30	--	Ungated	14/05/2021 **NR**	3.7,3.1,3.2	03

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
94	Pimpraj	2015	73°38□17□□ 20°10□ 45□□	25.00	0.56	37.80	--	Ungated	11/05/2021 07/02/2022	3.9, 3.2,3.13	03
95	Ambegan	2015	73°38□03□□ 20°13□ 37□□	25.62	0.47	42	--	Ungated	11/05/2021 07/02/2022	3.13, 3.2,3.11	03
96	Chafyachapada	2015	73°40□31□□ 20°24□ 53□□	16.02	0.06	--	--	Ungated	11/05/2021 07/02/2022	3.2, 3.13	02
97	Zarlipada	2015	73°38□00□□ 20°14□ 12□□	16.10	0.38	30.45	--	Ungated	11/05/2021 07/02/2022	3.11,3.2,3.13	03
98	Dhondalpada	U/C	73°38□07□□ 20°21□ 26□□	20.50	0.324	--	--	Ungated	11/05/2021 12/02/2022	3.7,3.5,3.2,3.13	04
99	Joran	2019	73°40□00□□ 20°18□ 00□□	19.50	2.542	117.16	---	Ungated	11/05/2021 07/02/2022	3.5,3.7,3.2,3.13,3.28	05
100	Vani	2019	73°40□00□□ 20°18□ 00	20.32	1.897	88.20	---	Ungated	11/05/2021 07/02/2022	3.5,3.7,3.2,3.13,3.28	05
101	Nanashi									3.5,3.7,3.13	03
	[C] CHIEF ENGINEER TIDC JALGAON										
	(1)SUPERINTENDING ENGINEER &ADMINISTRATOR , CADA, JALGAON.										
	(a)EXECUTIVE ENGINEER, DHULE IRRIGATION DIVISION, DHULE										
102	Deobhane	1976	74°78□00□□ 21°02□ 00□□	19.35	1.660	323.90	MH09MH0588	Ungated	18/04/2021 10/11/2021	3.5,3.7,3.1,3.20,3.6	05
103	Kanoli	1974	74°47□00□□ 20°30□ 00□□	24.50	11.90	1848.00	MH09MH0452	Ungated	18/04/2021 10/11/2021 **16/03/2022**	3.5,3.7,3.1,3.9,3.2,3.20,3.34	07
104	Khothare	1974	74°34□00□□ 21°06□ 00□□	15.75	4.870	428.00	MH09MH0432	Ungated	18/04/2021 10/11/2021	3.5,3.2,3.34,3.2,3.16	05
105	Malangaon	1970	74°50□30□□ 21°50□ 00□□	23.78	13.027	1075.1	MH09MH0223	Ungated	04/04/2021 22/11/2021	3.9,3.22,3.35,3.16	04

Sr.No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
106	Ranmala	1999	73°36□00□□ 21°32□ 00□□	17.73	4.61	800.0	MH09MH1480	Ungated	18/04/2021 10/11/2021	3.7,3.1,3.9,3.2,3.22,3.21,3.20	07
107	Raingan	1998	73°55□00□□ 21°07□ 00□□	24.09	7.786	642.80	MH09MH1475	Ungated	21/04/2021 16/11/2021	3.5,3.7,3.9,3.2,3.22,3.20,3.34	07
108	Thanepada -1	1972	74°48□00 □□ 21° 02□ 00□□	18.64	2.885	438.00	MH09MH0301	Ungated	20/04/2021 16/11/2021	3.5,3.7,3.9,3.2,3.34,3.20,3.16	07
109	Ambebara	1976	74°13□00□□ 21°35□ 00□□	22.00	2.386	442.93	MH09MH0433	Ungated	20/04/2021 16/11/2021	3.5,3.7,3.2,3.9,3.22,3.20,3.21,3.6	08
110	Kabryakhadak	2002	74°01□00□□ 21°42□ 00□□	21.82	3.959	829.46	MH09MH1610	Ungated	19/05/2021 22/11/2021	3.5,3.2,3.7,3.16	04
111	Wawad	1975	74°49□00□□ 20°39□ 00□□	16.60	1.485	224.00	MH09MH0488	Ungated	20/04/2021 16/11/2021	3.9,3.2,3.34,3.20,3.6	05
112	Burudakhe	1973	74°20□00□□ 21°10□ 00□□	17.75	1.470	298.00	MH09MH0358	Ungated	04/04/2021 22/11/2021	3.7,3.2,3.9,3.20	04
113	Rozwa	1977	73°52□12□□ 21°04□ 00□□	26.70	1.738	198.75	MH09MH0612	Ungated	02/11/2021 23/11/2021	3.5,3.9,3.34,3.20	04
114	Lauki	1983	74°55□00□□ 21°25□ 00□□	17.25	2.030	349.00	MH09MH0979	Ungated	15/05/2021 17/11/2021	3.5,3.7,3.9,3.2,3.34,3.20	06
115	Lamkani	1991	74°31□44□□ 21°05□ 39□□	19.00	3.34	1820.00	MH09MH1280	Ungated	18/04/2021 10/11/2021	3.7,3.1,3.9,3.2,3.21,3.6	06
116	Anchale	1983	74°50□00□□ 20°54□ 00□□	16.41	1.070	198.78	MH09MH0960	Ungated	18/04/2021 10/11/2021	3.7,3.1,3.9,3.2,3.21,	05
117	Kakani	1987	74°25□00□□ 21°36□ 00□□	21.60	2.660	782.00	MH09MH1168	Ungated	04/04/2021 22/11/2021	3.5,3.7,3.9,3.2,3.34,3.20,3.16,3.19	08

118	Kaayankada	1990	74°24□21□□ 20°53□ 20□□	17.34	2.360	557.00	MH09MH1243	Ungated	04/04/2021 22/11/2021	3.5,3.9,3.2,3.34,3.20,	05
119	Vikharan	1977	74°48□30□□ 21°37□ 38□□	24.90	2.644	361.00	MH09Mh0629	Ungated	14/05/2021 17/11/2021	3.5,3.7,3.1,3.9,3.2,3.34,3.21,3.20	08
120	Umarani	1993	74°13□00□□ 21°07□ 15□	16.19	1.09	102.00	MH09MH1304	Ungated	23/04/2021 01/11/2021	3.7,3.1,3.2,3.22,3.21,3.16	06

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
121	Padalpur	1991	74°14□45□□ 21°39□ 05□□	20.75	1.70	187.00	MH09MH1305	Ungated	22/04/2021 23/11/2021	3.7,3.9,3.2,3.34,3.21,	05
122	Gadhavali	1994	74°15□00□□ 21°39□ 30□□	16.52	0.94	320.0	MH09MH1344	Ungated	22/04/2021 23/11/2021	3.34,3.7,3.1,3.9	04
123	Nawali	1998	75° 07□ 00 □□ 21°16□ 00□□	19.24	1.94	430.00	MH09MH1455	Ungated	21/04/2021 16/11/2021	3.5,3.7,3.9,3.2,3.22,3.34,3.21,3.20	08
124	Khamkheda	1977	74°46□30□□ 21°07□ 00□□	18.71	3.220	579.00	MH09MH0641	Ungated	15/05/2021 17/11/2021	3.5,3.7,3.9,3.2,3.34,3.21,3.20	07
125	Kalikarad	1977	74°48□00□□ 21°00□ 05□□	22.00	2.17	424.00	MH09MH0634	Ungated	15/05/2021 17/11/2021	3.5,3.10,3.7,3.9,3.2,	05
126	Virkhel	1974	74°49□00□□ 21°39□ 00□□	15.50	0.88	286.00	MH09MH0419	Ungated	19/05/2021 22/11/2021	3.7,3.1,3.5,3.9,3.2,3.34,3.20	07
127	Purmepada	1955	74 ° 47□00□□ 20 ° 39□ 00□□	24.70	13.55	2141.00	MH09MH0073	Ungated	18/04/2021 10/11/2021	3.5,3.1,3.9,3.20,3.34,3.21,3.16	07
128	Khadkuna	1981	73 ° 52□19□□ 20 °32□30□□	19.50	6.257	513.57	MH09MH0889	Ungated	22/04/2021 23/11/2021	3.1,3.9,3.20	03
129	Shahane	1999	74 ° 45□00□□ 21 ° 37□ 00□□	16.20	1.88	253.00	MH09MH1949	Ungated	23/04/2021 27/11/2021	3.5,3.9,3.2,3.22	04
130	Dahyane	2010	74 ° 41□00□□ 20 ° 51□ 00□□	18.00	4.268	734.10	MH09MH1952	Ungated	19/04/2021 24/11/2021	3.20,3.21,3.6	03
131	Wadi	1988	75 ° 51□00□□	15.15	1.540	320.00	MH09MH1199	Ungated	14/05/2021 17/11/2021	3.5,3.7,3.9,3.2,3.34,3.21,3.20	07

			21 º 27□ 00□□								
132	Chaugaon	1987	74 º 34□ 00□□ 21 º 20□ 30□□	21.54	6.430	938.00	MH09MH1169	Ungated	17/11/2021 24/11/2021	3.4,3.5,3.7,3.9,3.2,3.20,3.34,3.21, 3.16,3.36	10
133	Sonkhadki	1997	74 º 00□ 00□□ 21 º 01□ 00□□	18.48	3.279	196.00	MH09MH1428	Ungated	21/04/2021 16/11/2021	3.5,3.7,3.9,3.2,3.20,3.21	06
134	Rangawali	1982	73 º 52□ 12□□ 21 º 04□ 00□□	25.63	15.02	1180.00	MH09MH0942	Ungated	21/04/2021 16/11/2021	3.5,3.1,3.7,3.9,3.2,3.22,3.20,3.32, 3.16,3.6	10

Sr.No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
135	Kondaval	1987	74 º 37□ 00□□ 21 º 31□ 00□□	18.80	1.830	214.00.	MH09MH1155	Ungated	23/04/2021 27/11/2021	3.7,3.9,3.16	03
136	Kulthe	1971	74 º 48□ 00□□ 21 º 20□ 39□□	13.20	3.20	654.00	MH09MH0263	Ungated	18/04/2021 10/11/2021 **16/03/2022**	3.5,3.7,3.9,3.22,3.20,3.16	06
137	Budki	1975	74 º 55□ 00□□ 21 º 32□ 00□□	15.18	2.15	643.00	MH09MH0515	Ungated	14/05/2021 17/11/2021	3.5,3.7,3.9,3.2,3.34,3.21,3.20	07
138	Singaspur	1997	73 º 21□ 54□□ 21 º 40□ 40□□	31.68	2.27	276.70	MH09MH1433	Ungated	22/04/2021 23/11/2021	3.7,3.20,3.34	03
139	Londhare	1988	74 º 30□ 00□□ 21 º 32□ 00□□	20.48	3.140	832.00	MH09MH1201	Ungated	23/04/2021 27/11/2021	3.5,3.9,3.2,	03
140	Nandarde	1992	74 º 50□ 00□□ 21 º 30□ 00□□	21.06	3.89	474.40	MH09MH1285	Ungated	14/05/2021 17/11/2021	3.5,3.7,3.9,3.2,3.34,.20	06
141	Vasdara	1986	73 º18□ 00□□ 21 º 30□ 00□□	16.61	1.156	230.00	MH09MH1144	Ungated	20/04/2021 24/11/2021	3.5, 3.2, 3.34,	03
142	Shewade	1980	74 º 36□ 00□□ 21 º 10□ 00□□	10.50	1.30	442.00	MH09MH0829	Ungated	17/04/2021 24/11/2021	3.20	01
143	Mukti	1873	74 º 53□ 00□□ 21 º 44□ 00□□	21.20	9.90	548.00	MH09MH0009	Ungated	17/04/2021 24/11/2021	3.5,3.9,3.2	03
144	Khekada	1977	73 º	19.20	1.480	67.00	MH09MH0601	Ungated	21/04/2021	3.1,3.9,3.2,3.7,3.20,3.16,3.19	07

			40□00□□ 21 o 02□30□□						16/11/2021		
145	Mahupada	1989	73 o 40□00□□ 21 o 02□30□□	16.47	2.558	126.95	MH09MH1948	Ungated	22/04/2021 23/11/2021	3.5,3.1,3.9,3.20,3.16	05
146	Khaperkheda	1976	74o40□12□□ 20 o 30□00□□	18.30	2.70	424.00	MH09MH0581	Ungated	23/04/2021 27/11/2021	3.20	01
147	Wakwad	1977	74 o 46□00□□ 21 o 07□00□□	28.46	2.910	418.00	MH09MH0633	Ungated	24/10/2021 17/11/2021	3.5, 3.7,3.9,3.2,3.21,3.34,3.20	07
148	Nandre	1979	74 o 25□45□□ 21 o 00□05□□	17.37	2.37	382.00	MH09MH0778	Ungated	18/04/2021 10/11/2021 **16/03/2022**	3.5,3.1,3.2,3.9	04
149	Kholghar	1986	74 o 49□00□□ 20 o 39□00□□	26.00	4.314	470.99	MH09MH1121	Ungated	20/04/2021 16/11/2021	3.5,3.2,3.9,3.22,3.34,3.20	06
Sr.No	**Name of Dam**	**Year of Completion**	**Location**	**Height in meters**	**Gross Capacity (Mm3)**	**Design Spillway Capacity (Cumecs)**	**Sr No.of Large Dam in National Register**	**Gated /Ungated**	**Date of Inspection Pre & Post Monsoon**	**Deficiencies noticed**	**Total Deficiencies**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
150	Dhanibara	1985	74 o 48□00□□ 21 o 02□00□□	19.65	1.660	418.80	MH09MH1085	Ungated	20/04/2021 16/11/2021	3.5,3.7,3.9,3.34,3.20,3.6	06
151	Khandlay	1974	74 o 25□45□□ 21 o 00□05□□	21.90	1.593	413.00	MH09MH0430	Ungated	18/04/2021 10/11/2021	3.2, 3.20	02
152	Khokhasa	1995	74 o 40□12□□ 21 o 34□00□□	24.72	1.523	135.00	MH09MH1368	Ungated	21/04/2021 16/11/2021	3.5,3.7,3.9,3.1,3.2,3.34,3.20,3.16	08
153	Shelbari	1982	74 o 08□30□□	20.70	1.589	403.00	MH09MH0929	Ungated	19/05/2021 22/11/2021	3.5,3.9,3.2,3.34,3.20	05

			20 º 50□ 00□□								
154	Hatti	1973	74º21□ 30□□ □□□ 21 º 13□ 00□□	18.75	2.740	659.00	MH09MH0373	Ungated	17/04/2021 24/11/2021	3.5,3.1,3.7,3.9,3.2,3.16	06
155	Chhawadi	1973	74 º 31□ 00□□ 21 º 06□ 00□□	17.20	4.420	1243.00	MH09MH0383	Ungated	17/04/2021 24/11/2021	3.7,3.9,3.2,3.22,3.34,3.20,3.16	07
156	Mugdhan	1982	73 º 45□ 00□□ 21 º 07□ 00□□	21.37	2.730	168.00	MH09MH1075	Ungated	21/04/2021 16/11/2021	3.9,3.2,3.22,3.34,3.21,3.20,3.16,	07
157	Haldani	1989	73 º 58□ 12□□ 21 º 09□ 00□□	19.42	3.420	410.00	MH09MH1231	Ungated	21/04/2021 16/11/2021	3.5,3.7,3.1,3.9,3.2,3.34,3.16	07
158	Sulipada	1987	73 º 50□ 00□□ 21 º 09□ 00□□	17.03	1.82	230.00	MH09MH1176	Ungated	21/04/2021 16/11/2021	3.9,3.2,3.1,3.22,3.34,3.21,3.16	07
159	Jalod	1998	74 º 45□ 00□□ 21 º 28□ 00□□	22.73	2.60	742.00	MH09MH1476	Ungated	14/05/2021 17/11/2021	3.5,3.7,3.9,3.2,3.34,3.21,3.20	07
160	Gadhad – Deo	1998	74 º 50□ 30.□□□ 21 º 36□ 30□□	22.80	1.730	230.00	MH09MH1468	Ungated	14/05/2021 17/11/2021	3.5,3.7,3.1,3.9,3.2,3.34,3.21	07
	(b)EXECUTIVE ENGINEER, JALGAON IRRIGATION DIVISION, JALGAON										
161	Abhora	1986	74º16□ 30□□ 19º28□ 45□□	27.16	7.440	1048	MH09MH1135	Ungated	19/04/2021 19/04/2021	3.2, 3.7,3.13,3.22,3.20,3.34,3.16, 3.6	08
162	Velhale	1995	75º52□ 00□□ 21º00□ 00□□	17.75	1.990	264.01	MH09MH0069	Ungated	01/06/2021 10/11/2021	3.5,3.7,3.9,3.2,3.22	05
163	Gondegaon	1970	75º37□ 00□□ 20º40□ 00□□	16.56	2.10	383.00	MH09MH0206	Ungated	28/05/2021 13/12/2021	3.2, 3.9,3.13,3.20	04
164	Tondapur	1992	75º15□ 00□□ 21º30□	15.30	6.30	1332.00	MH09MH1298	Ungated	03/12/2021 28/05/2021	3.5,3.7,3.9,3.2,3.13,3.22,3.6	07

			00□□						15/03/2022		
Sr. No.	**Name of Dam**	**Year of Completion**	**Location**	**Height in meters**	**Gross Capacity (Mm3)**	**Design Spillway Capacity (Cumecs)**	**Sr No.of Large Dam in National Register**	**Gated/ Ungated**	**Date of Inspection Pre & Post Monsoon**	**Deficiencies noticed**	**Total Deficiencies**
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**
165	Hivara	1980	75°40□ 00□□ 20°36□ 00□□	15.21	12.770	2738.00	MH09LH1342	Ungated	24/05/2021 21/12/2021	3.5, 3.1,3.9,3.7,3.13,3.20,3.6	07
166	Lahasar	1979	75°50□ 00□□ 20°47□ 00□□	14.96	1.64	237.00	MH09LH0759	Ungated	28/05/2021 13/12/2021	3.5,3.2,3.9,3.20,3.21	05
167	Pimpri	1973	75°34□ 00□□ 20°39□ 00□□	15.88	2.015	452.72	MH09LH0649	Ungated	28/05/2021 13/12/2021	3.5, 3.9,3.7,3.2,3.20	05
168	Kalamsara	1998	75°20□ 00□□ 20°20□ 00□□	16.00	6.92	1097.00	MH09LH1494	Ungated	24/05/2021 09/12/2021	3.5,3.9,3.2,3.13,3.23,3.34,3.6	07
169	Agnawati	1989	75°13□ 00□□ 20°29□ 00□□	14.83	3.00	952.00	MH09MH1225	Ungated	24/05/2021 21/12/2021	3.5,3.7,3.2,3.9,3.20,	05
170	Sarva Pimpri	1985	75°30□ 00□□ 20°37□ 00□□	15.81	2.96	853.00	MH09MH1097	Ungated	24/05/2021 21/12/2021	3.7,3.5,3.34,3.9,3.2,3.20,3.35,3.16,3.19	09
171	Charthana	1979	76°15□ 4□□ 21°3□ 00□□	17.60	1.388	209.40	MH09MH0864	Ungated	19/04/2021 28/12/2021	3.5,3.7,3.9,3.2,3.13,3.20,3.21,3.32,3.19,3.6	10
	©EXECUTIVE ENGINEER, GIRNA IRRIGATION DIVISION, JALGAON										
172	Kankraj	1971	75°04□ 00□□ 20°56□ 00□□	10.72	2.450	587.69	MH09MH0305	Ungated	05/05/2021 13/11/2021	3.5,3.7,3.2,3.9,3.22,3.34,3.21,3.20,3.6	09
173	Hatgaon-I	1973	74°52□ 00□□ 20°24□ 00□□	17.04	1.643	508.12	MH09MH0365	Ungated	21/05/2021 07/11/2021 **15/03/2022**	3.2,3.9,3.13,3.19,3.28	05
174	Krushnpuri	1997	74°38□ 00□□ 20°58□ 00□□	16.38	2.740	308.89	MH09MH1440	Ungated	22/05/2021 07/11/2021	3.7,3.9,3.1,3.2,3.13,3.22,3.23,3.20,3.28,3.6	10
175	Rajdehare	1981	74°52□ 00□□ 20°24□ 00□□	16.50	1.941	312.00	MH09MH0874	Ungated	22/05/2021 07/11/2021	3.18,3.2,3.9,3.13,3.25,3.34,3.20 ,3.16,3.28	09
176	Bhokarbari	1978	75°07□ 00□□ 20°55□ 00□□	22.45	7.09	187.50	MH09MH0682	Ungated	05/05/2021 13/11/2021	3.21,3.28,3.27	03
177	Valthan	1987	75°04□ 00□□ 20°56□ 00□□	14.15	2.176	595.00	MH09LH1166	Ungated	21/05/2021 07/11/2021	3.5,3.9,3.2,3.7,3.34,3.20,3.19,3.16,3.28	09

Sr.No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11	12
	(2)SUPERINTENDING ENGINEER,JALGAON IRRIGATION PROJECT CIRCLE, JALGAON										
	(a)EXECUTIVE ENGINEER, Minor Irrigation Division JALGAON										
178	Dighi-II	1988	75°10□ 50□□ 21°20□ 00□□	18.87	1.057	224.95	MH09MH1191	Ungated	NR NR	------	00
179	Hatgaon-II	1998	74°52□ 00□□ 20°24□ 00□□	19.81	2.372	995.69	MH09MH1478	Ungated	NR NR	-----	00
180	Nashirabad	1996	74°38□ 00□□ 20°58□ 00□□	16.80	3.125	982.00	MH09MH1407	Ungated	NR NR **17/03/2022**	3.3,3.13,3.29,3.1,3.2,3.26,3.5,3.9,3.25,3.30,3.28,3.24.	12
181	Galan –II	2006	75°15□ 30□□ 20°34□ 46□□	16.17	2.648	628.49	MH09MH1958	Ungated	NR NR	------	00
182	Chinchat (Lohara)	2006	75°56□ 00□□ 21°17□ 00□□	18.74	1.825	308.00	MH09MH1957	Ungated	NR NR	-----	00
183	Devhari	2002	75°45□ 00□□ 20°38□ 00□□	15.60	3.104	632.94	MH09MH1170	Ungated	18/05/2021 28/11/2021	3.2, 3.7,3.5,3.1,3.13,3.22,3.28	07
184	Kotgaon	2007	75°00□ 00□□ 20°26□ 00□□	18.00	7.162	1010.38	MH09MH1960	Ungated	NR NR	------	00
185	Odhare	2010	75°58□ 30□□ 20°21□ 15□□	17.50	3.972	369.88	MH09MH1961	Ungated	NR NR	-----	00
186	Moygaon	2007	75°43□ 00□□ 20°40□ 00□□	15.73	4.622	237.70	MH09MH1963	Ungated	17/05/2021 28/11/2021	3.5,3.7,3.2,3.9,3.13,3.20,3.7,3.28,3.22	09
187	Hijryanalla	2009	75°43□ 00□□ 20°40□ 00□□	15.56	1.854	57.84	MH09MH1964	Ungated	17/05/2021 28/11/2021	3.5,3.2,3.7,3.13,3.20,3.28	06
188	Paldhi	2007	75°43□ 00□□ 20°40□ 00□□	17.53	4.755	81.35	MH09MH1965	Ungated	17/05/2021 28/11/2021	3.5,3.9,3.1,3.2,3.13,3.20,3.22,3.7,3.28	09
189	Londhari	2007	75°43□ 00□□ 20°40□	15.60	2.609	88.35	MH09MH1962	Ungated	17/05/2021 28/11/2021	3.2,3.7,3.1,3.5,3.1,3.13,3.22,3.21,3.20,3.28,	10

			00□□								
190	Vadri	1994	75°42□00□□ 20°16□ 00□□	26.64	2.510	874.46	MH09MH1336.	Ungated	NR NR	----	00

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
191	Gangapuri	1994	75°06□ 00□□ 21°21□ 00□□	17.93	2.392	380.00	MH09MH1328	Ungated	NR NR	-----	00
192	Sur	2008	75°59□ 00□□ 20°42□ 30□□	17.98	10.478	1378.40	MH09MH1966	Ungated	18/05/2021 28/11/2021	3.9,3.2,3.13,3.21,3.20,3.7	06
193	Matran nalla	2006	75°59□ 00□□ 21°17□ 40□□	24.17	3.482	547.29	MH09MH1959	Ungated	NR NR	------	00
194	Jondhalkheda	1997	76°20□ 00□□ 21°02□ 30□□	20.39	2.114	501.00	MH09MH1437	Ungated	NR NR	-----	00
(3)SUPERINTENDING ENGINEER, DIPC, DHULE											
(a)EXECUTIVE ENGINEER , GIRANA RIVER VALLEY PROJECT DN, NASHIK											
195	Nanduri	2009	73°55□ 00□□ 20°26□ 00□□	19.70	1.576	227.76	MH09MH1813	Ungated	09/05/2021 **NR**	3.18,3.1,3.22	03
196	Dasane	1985	74°01□ 00□□ 20°40□ 00□□	16.52	2.340	232.02	MH09MH0216	Ungated	19/05/2021 26/11/2021	3.5, 3.7,3.1,3.9,3.2, 3.13	06
(b)EXECUTIVE ENGINEER, MINOR .IRRIGATION .DIVISION. DHULE											
197	Abhanpur	2004	74°42□ 00□□ 25°28□ 00□□	25.99	3.660	635.00	MH09MH1951	Ungated	13/05/2021 12/11/2021	3.5,3.19,3.1,3.2,3.7, 3.13,3.20,3.16,3.28	09
198	Fagane	2007	74°51□ 00□□ 20°52□ 00□□	25.99	3.660	635.00	MH09LH1953	Ungated	10/05/2021 10/05/2021	3.5,3.1,3.7,3.9,3.2, 3.13,3.20	07
©)EXECUTIVE ENGINEER , NANDURBAR MEDIUM PROJECT DIVISION. NANDURBAR											
199	Deolipada	2005	74°12□ 00□ □ 21°03□ 00	17.03	3.34	232.12	MH09MH1969	Ungated	19/06/2021 26/11/2021	3.5,3.7,3.9,3.2,3.13, 3.20,3.16,3.19,3.28	09
200	Chirda	2010	74°23□ 00□ □ 21°23□ 00	16.61	2.679	952.0	MH09MH1968	Ungated	06/05/2021 02/11/2021	3.5,3.7,3.9,3.2,3.13, 3.20,3.16,3.28,3.19	09
201	Choupale	2010	74°23□ 00□ □ 21°23□ 00	16.61	2.679	547.72	MH09MH2250	Ungated	29/05/2021 10/11/2021	3.5,3.7,3.9,3.2,3.13, 3.34,3.20,3.28,3.17,3.6	10
202	Nesu	2009	74°30□ 00□ □ 21°30□ 00	20.72	11.04	1036.73	MH09MH197	Ungated	26/05/2021 25/11/2021	3.5,3.7,3.1,3.2,3.9,3.13,3.34,3.22,3.20,3.28	10

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
203	Amrawati nalla	2004	74°20□00□□ 21°02□00	19.41	21.06	1224.40	MH09MH1967	Ungated	29/05/2021 10/11/2021	3.5,3.7,3.2,3.20,3.13, 3.28	06
204	Visarwadi	1990	74°00□00□□ 20°07□30	29.40	6.81	651.80	MH09MH1238	Ungated	19/06/2021 26/11/2021 **25/03/2022**	3.1,3.5,3.6,3.7,3.2,3.13,3. 21,3.28	08
205	Dhanpur	2017	74°16□00□□ 20°40□00	19.75	3.18	582.00	Not Given	Ungated	28/05/2021 02/11/2021	3.20,3.21,3.35,3.28	04
206	Ranknalla	2007	74°27□00□□ 20°21□00	14.87	6.77	1188.42	MH09LH1975	Ungated	26/05/2021 25/11/2021	3.5,3.7,3.9,3.1,3.34, 3.17,3.28	07
207	Mendipada	1972	74°44□58□□ 18°36□56□□	16.86	2.995	1271.13	MH09MH0528	Ungated	19/06/2021 Not Mentioned	3.5,3.7,3.9,3.2,3.13, 3.22,3.21,3.35,3.16, 3.19,3.28	11
208	Dhong	2006	74°44□58□□ 18°36□56□□	15.00	2.69	298.00	----	Ungated	19/06/2021 26/11/2021	3.5,3.7,3.1,3.9,3.2,3.1, 3.13,3.20	08
[D] CHIEF ENGINEER SPECIAL PROJECT, PUNE											
(1)SUPERINTENDING ENGINEER, KUKADI IRRIGATION CIRCLE,PUNE.											
(a) EXECUTIVE ENGINEER, KUKADI IRRIGATION DIVISION NO.2, SHRIGONDA											
209	Bardari	1973	74°51□00□□ 19°06□ 30□□	16.18	1.860	561.03	MH09MH0370	Ungated	18/05/2021 NR	3.5,3.7,3.9,3.2,3.34, 3.20,	06
210	Deulgaon siddi	1972	74°45'00□□ 18 ° 43'00"	15.40	2.320	927.00	MH09MH0308	Ungated	20/05/2021 21/11/2021	3.5,3.7,3.9,3.2,3.20, 3.34,3.16,	07
211	Bhutwada (OLD)	1973	75°20'00□□ 18 ° 46'57"	23.46	3.06	1087.00	MH09MH0382	Ungated	Not Mentioned 13/11/2021	3.5,3.9,3.7,3.2,3.34, 3.21,3.20,3.6	08
212	Khairy	1990	75°26'00□□ 18 ° 16'00"	18.10	15.110	1962.00	MH09MH1227	Ungated	17/06/2021 13/11/2021	3.5,3.7,3.9,3.20,3.21, 3.6,3.35,3.16	08
213	Hanga	1978	75°38□00□□ 18° 19□ 00□□	15.84	1.830	1010.00	MH09MH0734	Ungated	19/05/2021 21/11/2021	3.5,3.7,3.2,3.9,3.22, 3.20,3.21,3.16,3.19	09
214	Ratnapur	1985	75°17'00□□ 18 ° 43'00"	17.20	2.370	1583.08	MH09MH1103	Ungated	Not Mentioned 13/11/2021	3.5,3.7,3.9,3.2,3.34, 3.21,3.20,3.16	08

Sr. No.	Name of Dam	Year of Completion	Location	Height in meters	Gross Capacity (Mm3)	Design Spillway Capacity (Cumecs)	Sr No.of Large Dam in National Register	Gated/ Ungated	Date of Inspection Pre & Post Monsoon	Deficiencies noticed	Total Deficiencies
215	Dhondpargaon	1977	74°25□ 00□□ 19° 10□ 00□□	18.35	2.483	534.48	MH09MH0639	Ungated	Not Mentioned 19/11/2021	3.9,3.2,3.34,3.21,3.20,3.16	06
216	Kaudgaon	1973	74°05□ 00□□ 19° 06□ 00□□	15.55	2.487	770.00	MH09MH0374	Ungated	18/05/2021 20/11/2021	3.7,3.2,3.21,3.20,3.31,3.16,	06
217	Chichondi patil	1977	74°55□ 00□□ 19°00□ 00□□	15.06	2.80	908.72	MH09MH0647	Ungated	18/05/2021 20/11/2021	3.2,3.20,3.9,3.16,	04
218	Bhatodi	1892	74°53□ 00□□ 19°03□ 10□□	15.24	1.05	760.33	MH09MH0019	Ungated	18/05/2021 20/11/2021 **10/02/2022**	3.34,3.20	02
219	Naigaon	1978	75°24□ 00□□ 18°19□ 00□□	15.96	2.368	756.24	MH09MH728	Ungated	Not Mentioned19 /11/2021	3.1,3.5,3.9,3.2,3.7, 3.34,3.20,3.16,3.6	09
220	Telanghashi	1975	75°26□ 00□□ 18°20□ 00□□	17.12	1.070	218.40	MH09MH0486	Ungated	Not Mentioned Not Mentioned	3.1,3.5,3.7,3.9,3.2, 3.34,3.20,3.16,3.6	09
221	Visapur	1926	74°34□ 55□□ 18°48□ 46□□	25.60	26.10	1968.00	MH09MH0054	Ungated	10/05/2021 14/11/2021	3.5,3.7,3.3,3.10,3.9, 3.34,3.20,3.16,3.6	09
222	Ghodegaon	1972	74°44□ 58□□ 18°36□ 56□□	16.86	2.995	1271.13	MH09MH0528	Ungated	Not Mentioned 20/11/2021	3.5,3.7,3.8,3.2,3.9, 3.34,3.16	07
223	Bhutwada (NEW)	2006	75°30□ 00□□ 18°46□ 50□□	22.10	1.72		Proposed to be included in NRLD	Ungated	---- 19/11/2021	3.1,3.9,3.2,3.7,3.34, 3.21,3.6	07
(b)	**EXECUTIVE ENGINEER, KUKADI IRRIGATION DIVISION NO.1,NARAYANGAON**										
224	Yesarthav	2008	73°56□ 27□□ 19° 21□ 04□□	35.03	7.466	949.00	MH09LH2042	Ungated	12/06/2021 -----	3.22, 3.20	02
225	Palsunde	2021	74°02□ 00□□ 19° 52□ 00□□	25.00	2.443	300.16	Proposed to be included in NRLD	Ungated	12/06/2021 -----	3.21, 3.20	02

Table 3.16

Class-I Dams with Category-1 Deficiency (Private Owned)

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
---------- No Such Dams under this class ----------						

Table 3.17

Class-I Dams with Category-2 Deficiency (Private Owned)

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Sr. No	Dam features	Date of inspection	Inspecting Officer	Main component of Dam	Observations / Significant deficiencies noticed	Remedial measures suggested
1	2	3	4	5	6	7
31	Name:Chehedi Bandhara Year of Completion:2008 Location : Longitude: 73°51□ 26□□" Latitude: 19° 55□ 53□□ Height: 7.50m Gross capacity:3.879Mm3	11/08/2021 17/01/2022	Shri. P.S.Patare E.E. D.S.D.3, Nashik	Spillway Gate	Hoisting cable is not properly tightened. It may create problems during gate operation. (A18)	It may be repaired in consultation with the of Mechanical Organisation and with prior approval from competent technical authority

Table 3.18

Class-I Dams with Category-3 Deficiency (Private Owned)

Sr. No	Name of Dam	Date of Completion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm^3	Design Spillway Capacity m^3 / sec	Sr.No. in NRLD Register	Gated / Ungated	Date of Inspection Pre & Post	Deficiencies noticed	Total Deficiencies
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	12
The Comissioner, Nashik Municipal Corporation, Nashik											
1	Chehedi Bandhara	2008	73°51□26□□ 19° 55□ 53□□	7.50	3.879	191.00	MH09LH2058	Gated	11/08/2021 17/01/2022	3.3,3.13,3.27,3.1,3.2, 3.18,3.5,3.24,3.30	09

Table 3.19

Class-II Dams with Category-1 Deficiency (Private Owned)

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
---------- No Such Dams under this category is reported ----------						

Table 3.20

Class-II Dams with Category-2 Deficiency (Private Owned)

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
MAHARASHTRA JEEVAN PRADHIKARAN, WATER MANAGEMENT DIVISION,NASHIK						
1.	Name:**Talegaon** Year of Completion:- **1987** Location : Longitude:- **73° 32□ 37 □□** Latitude: - **19° 40□ 42 □□** Height: **21.80 m.** Gross capacity **11.68 Mm³**Spillway capacity: **36.00 cumecs** Sr.No.in National Register of Large Dams: **MH09LH2058**	03/08/2021 06/01/2022	**Shri. P.S.Patare , E.E. D.S.D.3, Nashik** **Shri G.P.Vadnerkar SDO, D.S.D.3, Nashik**	Earth Dam	No documentation regarding checking of Crest Profile is observed. Dam top was not free from undulation and local depression.(B1)	Total station survey of the dam and dam section should be carried out. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. Checking of crest profile is essential to identify the excessive/uneven settlement of the dam.
				Outlet	Flooring arrangement inside the outlet well is heavily corroded & damaged. (B5)	Flooring arrangement inside the well should be repaired in consultation with Mechanical Organization immediately.
				W.W bar & T.C.	Waste weir bar of Talegaon dam is ungated and constructed in UCR masonry. It is in unfinished condition. Field officers reported that the proposal of increasing of height of dam is in process. So it is in unfinished condition. Pointing of UCR masonry also damaged. At the time of inspection, Leakages are observed through body W.W. bar.(B7)	Identify the leakage with exact locations and quantify the leakage with respect to reservoir water level. Communicate these facts to DSO, Nashik. Waste weir bar should be repaired immediately in consultation with CDO Nashik

					Height of both flank walls is less as compare to the height of dam. (A16)	It is general practice to keep the top of flank wall up to TBL. Decision regarding the top of flank wall can be taken with reference to existing section and approved drawing in consultation with CDO, Nashik.

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
2.	Name:**Malmatha** Year of Completion:-**1976** Location : Longitude:- **74°29□ 00□□** Latitude: - **20° 44□ 00□□** Height: **8.330 m.** Gross capacity:**3.650 Mm³**Spillway capacity:**24.90 cumecs** Sr.No.in National Register of Large Dams: **Proposed to be included in NRLD**	05/08/2021 09/02/2022	**Shri. P.S.Patare , E.E. D.S.D.3, Nashik** **Shri G.P.Vadnerkar SDO, D.S.D.3, Nashik**	Earth Dam	No documentation regarding checking of Crest Profile is observed. Dam top was not free from undulation and local depression.(B1)	Total station survey of the dam and dam section should be carried out. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. Checking of crest profile is essential to identify the excessive/uneven settlement of the dam.
				W.W bar & T.C.	Waste weir bar of Malmatha dam is ungated and constructed in UCR masonry. It is damaged at some places. It is noticed that, there is some construction work was done on it(.B7) Right side flank wall is damaged at some places. (A16) Scouring also noticed beneath the Waste weir bar wall.(A17)	Waste weir bar should be repaired immediately & in accordance with approved drawing. Flank wall should be repaired immediately. Scouring beneath the waste weir bar should be repaired immediately.
				Access road	All weather approach road not properly maintained.(B6)	Properly constructed and well maintained all weather approach road should be provided.

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
COMMISSIONER, MALEGAON MUNICIPAL CORPORATION, MALEGAON						
3.	Name**: Talwade** Year of Completion:- **2004** Location : Longitude:- **74° 20 09** Latitude: - **20° 23 00** Height: **18.85 m.** Gross capacity **1.174 Mm³**Spillway capacity: **136.68 cumecs** Sr.No.in National Register of Large Dams: **MH09LH2058**	05/08/2021 09/02/2022	**Shri. P.S.Patare , E.E. D.S.D.3, Nashik** **Shri G.P.Vadnerkar SDO, D.S.D.3, Nashik**	Outlet	Outlet gate is not in working condition. Stem rod is bent up.(B5)	Gate and stem rod should be repaired with consultation with Mechanical Organisation immediately.
				W.W bar & T.C.	Scouring noticed beneath waste weir bar.(A17)	Scouring beneath the waste weir bar should be repaired immediately.

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
COMMISSIONER, DHULE MUNICIPAL CORPORATION, DHULE						
4.	Name**: Dedargaon** Year of Completion:- **1975** Location : Longitude:- **----** Latitude: - **----** Height: **20.00 m.** Gross capacity:**2.090 Mm³**Spillway capacity:**1940.00 cumecs** Sr.No.in National Register of Large Dams: **MH09LH2058**	05/08/2021 09/02/2022	**Shri. P.S.Patare , E.E. D.S.D.3, Nashik** **Shri G.P.Vadnerkar SDO, D.S.D.3, Nashik**	Earth Dam	Dam top was not free from undulation and local depression.(B1)	Total station survey of the dam and dam section should be carried out. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. Checking of crest profile is essential to identify the excessive/uneven settlement of the dam.
				W.W bar & T.C.	Waste weir bar of Dedargaon dam is ungated and constructed concrete. It is damaged at some places. Vegetation noticed on U/S & D/S side of waste weir bar. (B7)	Waste weir bar should be repaired immediately in accordance with approved drawing & vegetation should be removed.
					Flank wall is damaged. Needs to be repaired. (A16)	Repairing of flank wall should be carried out in accordance with approved drawing.
				Access road	All weather approach road not constructed.(B6)	Properly constructed and well maintained all weather approach road should be provided.

Executive Engineer, MIDC, Dhule						
5.	Name**: Motinalla** Year of Completion:-**1987** Location : Longitude:- 74^0 45' 00" Latitude: - 20^0 59' 00" Height: **19.03 m.** Gross capacity:**1.690 Mm³**Spillway capacity:**365.00 cumecs** Sr.No.in National Register of Large Dams: **MH09MH1161**	05/08/2021 09/02/2022	**Shri. P.S.Patare , E.E. D.S.D.3, Nashik** **Shri G.P.Vadnerkar SDO, D.S.D.3, Nashik**	Dam & Dam reach	No documentation regarding checking of crest profile is observed. Dam top was not free from some undulation and local depression. (B1)	Total station survey of the dam and dam section should be carried out. Dam section (Top width, side slopes, and drains) should be checked. Surveyed section should be superimposed on design section to ascertain whether earthen embankment is under section or not. Checking of crest profile is essential to identify the excessive/uneven settlement of the dam
				Outlet	All weather approach road not constructed.(B6)	Properly constructed and well maintained all weather approach road should be provided.

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
CHIEF OFFICER,IGATPURI NAGAR PARISHAD, IGATPURI						
6.	Name**: Bara Bunglow** Year of Completion:-**----** Location : Longitude:- **----** Latitude: - **----** Height: **----** Gross capacity:**----** Spillway capacity:**-----** Sr.No.in National Register of Large Dams: **Proposed to be included in NRLD**	03/08/2021 06/01/2022	**Shri. P.S.Patare , E.E. D.S.D.3, Nashik** **Shri G.P.Vadnerkar SDO, D.S.D.3, Nashik**	Earth Dam	Minor leakages through dam body & minor sweating at some portion on D/S side of Masonry dam was noticed during visit. (A11)	Identify the leakage with exact chainage and quantify the leakages with respect to reservoir water level. Communicate these facts to DSO, Nashik to recommend proper remedial measure.
				W.W bar & T.C.	End weir & apron could not inspect due to water ponding & proper access is not available to end weir. (B7)	Access road should be made available to End weir. Inspection of Apron & end weir should be done by field officers when it will become dry & its report should be sent to DSO Nashik.
					Minor leakages were noticed through right side flank wall. (A16)	Identify the leakage with exact chainage and quantify the leakages with respect to reservoir water level. Communicate these facts to DSO, Nashik to recommend proper remedial measure.
				Access road	All weather approach road not constructed.(B6)	Properly constructed and well maintained all weather approach road should be provided.
CEO, MANMAD NAGAR PARISHAD, MANMAD, DIST. NASHIK						
7.	Name**: Waghdardi** Year of Completion:- **1972** Location :	------- 11/01/2021	**, E.E. D.S.D.3, Nashik** **Shri. P.S.Patare** **Shri G.P.Vadnerkar**	**Earth Dam**	Stagnant water noticed at d/s side in gorge portion.(A2)	The cause of ponding should be identified and standing water should be techno economically drained to natural drain.

	Longitude:- **----** Latitude: - **----** Height: **10.67 m.** Gross capacity: **2.25 Mm³**Spillway capacity:**3.110.00 cumecs** Sr.No.in National Register of Large Dams: **MH09LH20058**		**SDO, D.S.D.3, Nashik**	**W.W bar & T.C.**	Leakages are seen through waste weir bar. (B7)	Source of leakage should be identified and quantified with respect to reservoir water level and be treated properly.

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
CEO, NANDGAON NAGAR PARISHAD, NANDGAON, DIST. NASHIK						
8.	Name**: Dahegaon** Year of Completion:- **1975** Location : Longitude:- **----** Latitude: - **----** Height: **20.00 m.** Gross capacity: **2.090 Mm³**Spillway capacity: **1940.00 cumecs** Sr.No.in National Register of Large Dams: **MH09LH20058**	------- 11/01/2021	**, E.E. D.S.D.3, Nashik** **Shri. P.S.Patare** **Shri G.P.Vadnerkar** **SDO, D.S.D.3, Nashik**	**Earth Dam**	Stagnant water noticed at d/s side in gorge portion.(A2)	The cause of ponding should be identified and standing water should be techno economically drained to natural drain.
				WW Bar	Leakages are seen through right side bar.(B7)	Source of leakage should be identified and be treated properly.

Table 3.21

Class-II Dams with Category-3 or No Deficiency (Private Owned)

Sr. No	Name of Dam	Date of Completion	Location Longitude/ Latitude	Height in m	Gross Capacity Mm³	Design Spillway Capacity m³ / sec	Sr.No. in NRLD Register	Date of Inspection Pre & Post	Deficiencies noticed	Total Deficiencies
1	2	3	4	5	6	7	8	9	10	11
CHIEF ENGINEER MIDC MUMBAI SUPERINTENDING ENGINEER MIDC JALGAON EXECUTIVE ENGINEER MIDC DHULE										
1	Motinalla	1987	74°45□ 00□□ 20° 59□ 00□□	19.03	1.690	365.00	MH09MH1161	05/08/2021 09/02/2022	3.3,3.13,3.27,3.1,3.2,3.26,3.7,3.5,3.25,3.9, 3.24	11
EXECUTIVE ENGINEER,M.J.P.WATER MANAGEMENT DN.NASHIK										
2	Malmatha	1976	74°29□ 00□□ 20°44□ 00□	8.330	3.650	24.90	Proposed to be included in NRLD	05/08/2021 09/02/2022	3.3,3.13,3.27,3.29,3.1,3.6,3.2,3.26,3.7,3.9, 3.4,3.25,3.21,3.30,3.24	15
CHIEF OFFICER,IGATPURI NAGAR PARISHAD, IGATPURI										
3	Bara Banglow	---	---	---	---	---	Proposed to be included in NRLD	03/08/2021 06/01/2022	3.13,3.29,3.27,3.7,3.5,3.21,3.2,3.26,3.93.25,3.3 5,3.21,3.30,3.24,3.3	15
COMMISSIONER, DHULE MUNICIPAL CORPORATION, DHULE										
4	Dedargaon	---	---	---	---	---	MH09LH2058	05/08/2021 09/02/2022	3.3,3.13,3.27,3.1,3.6,3.2,3.26,3.7,3.4, 3.9,3.25,3.21,3.30,3.24	14
COMMISSIONER, MALEGAON MUNICIPAL CORPORATION, MALEGAON										
5	Talwade	2004	74°20□ 09□□ 20°23□ 00□	18.85	1.174	136.68	MH09LH2058	05/08/2021 09/02/2022	3.3,3.13,3.27,3.2,3.26,3.5,3.7,3.9,3.25,3.21,3.3 0,3.24	12
CEO, NANDGAON NAGAR PARISHAD, NANDGAON, DIST. NASHIK										
6	Dahegaon	1975	---	20.00	2.090	1940.00	MH09LH2058	--- 11/01/2021	3.3,3.13,3.27,3.1,3.2,3.26,3.5,3.7,3.9, 3.25,3.34,3.30,3.24	13
CEO, MANMAD NAGAR PARISHAD, MANMAD, DIST. NASHIK										
7	Wagdardi	1972	---	10.67	2.25	3110.00	MH09LH2058	--- 11/01/2021	3.3,3.13,3.27,3.1,3.5,3.2,3.26,3.4,3.7, 3.9,3.25,3.30,3.24	13
SUPERINTENDING ENGINEER , MAHARASHTRA JEEVAN PRADHIKARAN, WATER MANAGEMENT DIVISION,NASHIK EXECUTIVE ENGINEER ,MAHARASHTRA JEEVAN PRADHIKARAN, WATER MANAGEMENT DIVISION,NASHIK										
8	Talegaon	1987	73° 32□ 37 □□ 19° 40□ 42 □□	21.80	11.68	36.00	MH09LH2058	03/08/2021 06/01/2022	3.3,3.13,3.27,3.6,3.2,3.26,3.7,3.5,3.9, 3.25,3.21,3.20,3.30,3.24	14

Table 3.22

Category-1 Deficiency in Class-I Dams (Private dam)

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.1**: Boil leakage/ seepage/ wet patches/ slushiness,in Earthen Dam.	1)Gul 2) Susri	02
2	**A 2**: Standing pool / Ponding / Water Logging / Slushy condition on D/S of Dam	1)Mula 2) Susri	02
3	**A 3** : Leakages in vicinity of junction between earthen dam & masonry dam portion.	--	--
4	**A 4** : Major leakages through outlet conduit/pipe joints/Gates	1)Ranipur	01
5	**A 5** ; Relief wells not functioning properly./ Abnormal rise in water level in wells.	--	--
6	**A 7 :** Retrogression /scouring in tail channel.	1)Ranipur	01
7	**A 8** : Drainage gallery in accessible/No adequate lighting./ No dewatering arrangement or failure.	1)Gul 2) Susri	02
8	**A 10** : Heavy leakages through porous pipes/ through dam body in gallery /monolith joints.	1)Gul 2)Punand	02
9	**A 11** : Sweating / seepages through D/S of masonry dam	1)Bhandardara 2) Mula 3) Punand	03
10	**A 12** : Excessive considerable leaching from seepage water.	----	--
11	**A 13** : Swelling / minor cracking observed on body of dam	**--**	--
12	**A 14** : EDA / Stilling basin damaged/Hydraulic performance not good	1)Manyad	01
13	**A 15** : Leakages through spillway /piers//junction of flank wall.	--	--
14	**A 18** :Wire ropes of hoist not in good condition/hoisting structure damaged/cracked.	1)Anjani 2) Susri	02
15	**A 19** : Alternative power system Generator for gate operation not working properly.	1)Anjani	01
16	**B 5 :** Outlet gates not functioning properly. Stem rod is bent(Service gate/Emergency gate/Stop log gate/sluice gate)	1) Anjani 2) Punand	02
17	**B 12** : Damage to Rubber seals/Leakages through gates.	1)Anjani 2) Punand 3) Susri	03

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 ----------			

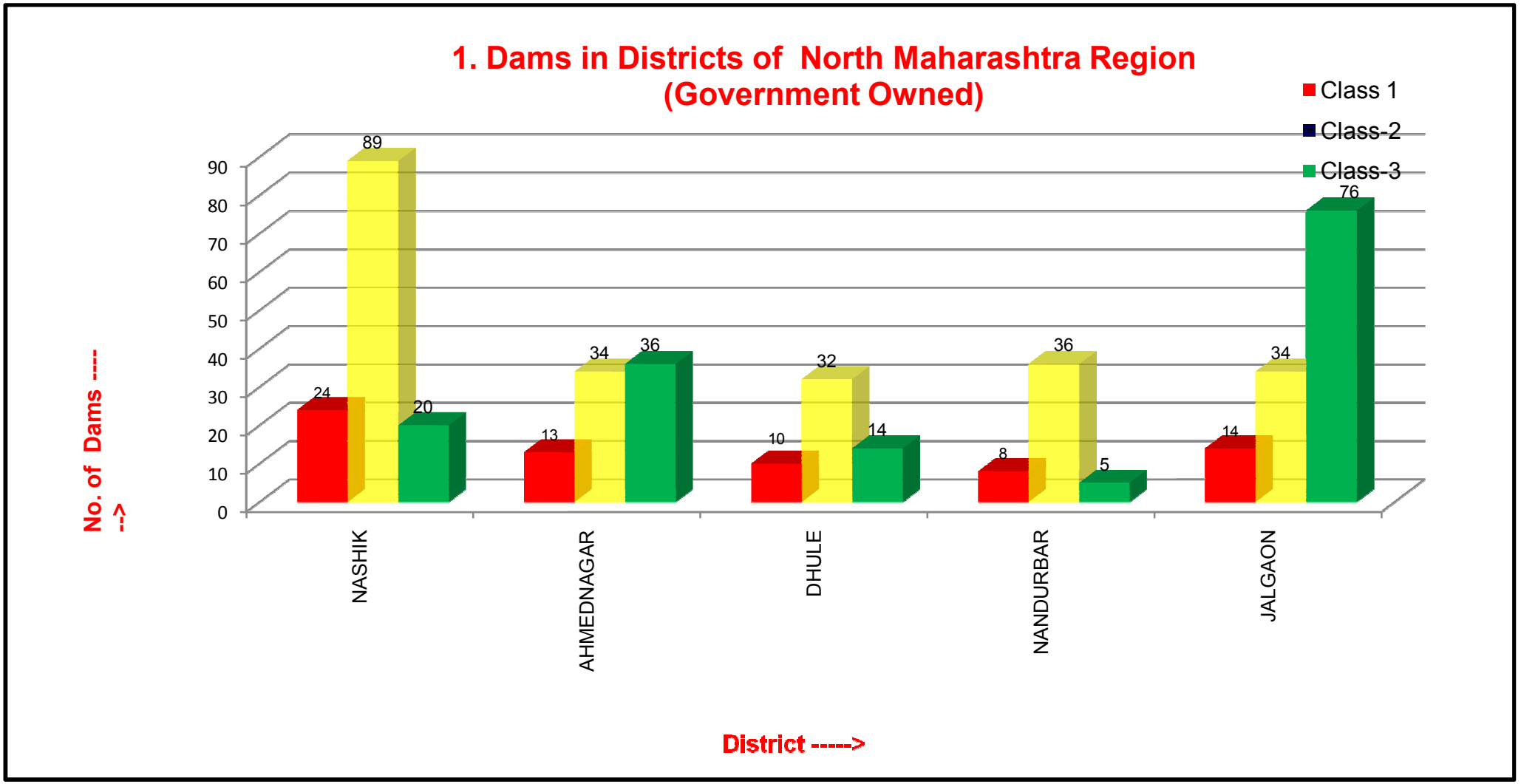
Table 3.25

Category-2 Deficiency in Class-II Dams

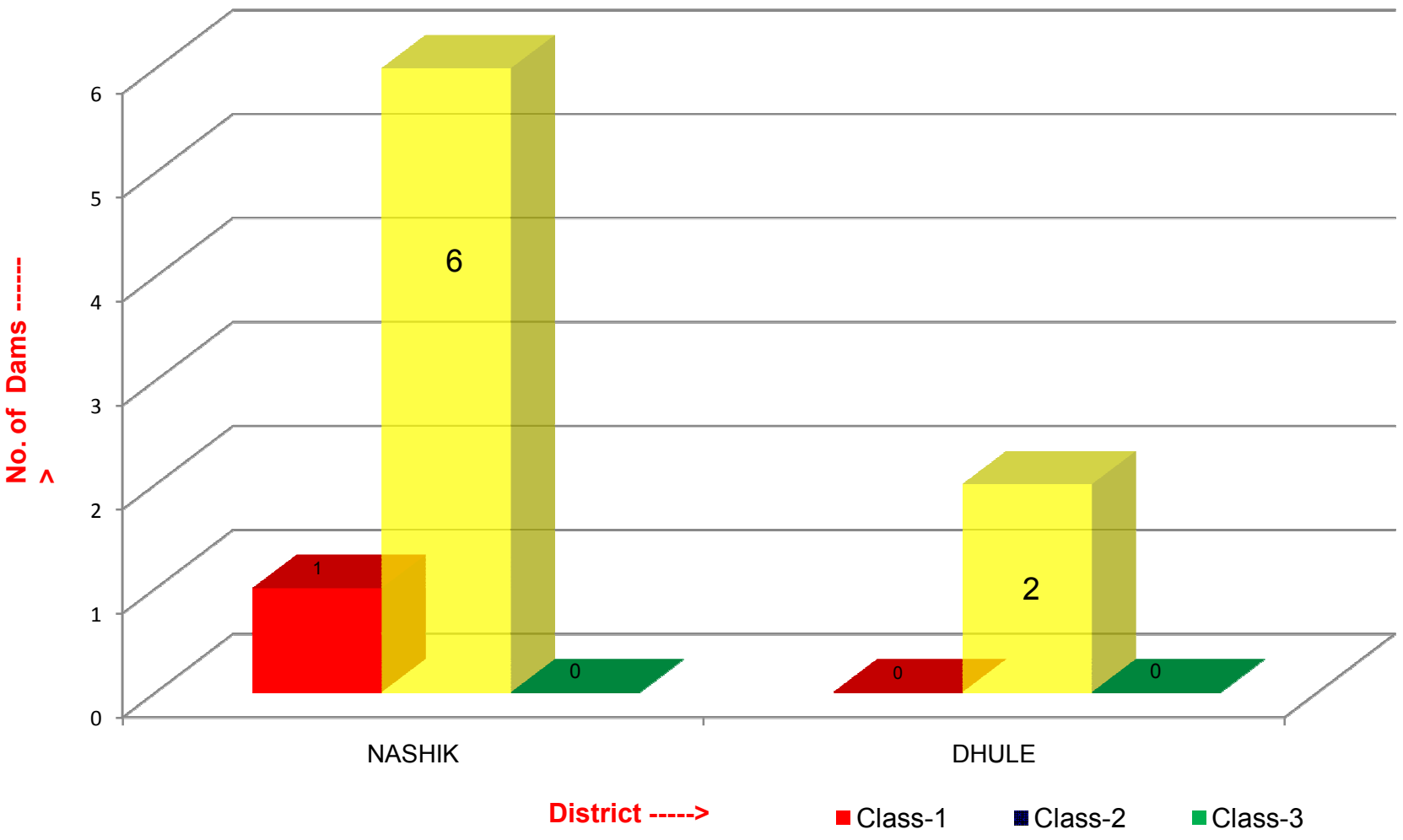
Sr. No	Deficiency	Names of dams	Total no of dams
1	**2**	**3**	**4**
1	**A.1**: Boil leakage/ seepage/ wet patches/ slushiness,in Earthen Dam.	1)Khaperkheda 2)Nandre 3)Dhanibara 4) Rajdhere 5) Ambikhalsa	05
2	**A 2**: Standing pool / Ponding / Water Logging / Slushy condition on D/S of Dam	1) Khandlay 2) Sur 3)Mukti 4) Rajdhere 5) Khokasa 6) Agnawati 7) Ratnapur 8) Chichondi Patil 9) Ambikhalsa	09
3	**A 3** : Leakages in vicinity of junction between earthen dam & masonry dam portion.	1) Shelbari	01
4	**A 4** : Major leakages through outlet conduit/pipe joints/Gates	1) Mahiravani 2) Shinde 3) Khandlay 4) Agnawati 5)Khaparkheda6) Wakwad 7) Kholghar 8) Dhanibara 9) Khokasa 10) Aad 11) Krushnapuri 12) Bhadne 13) Sur 14) Jamlevani	14
5	**A 5** ; Relief wells not functioning properly./ Abnormal rise in water level in wells.	--	--
6	**A 6** : Outlet well is damaged/not in good condition /cracks observed/jets of water in well.	1)Shinde 2) Bhadne 3) Nandre 4) Dhanibara 5) Khandlay 6) Haldani 7) Ratnapur 8) Telanghashi 9) Naigaon10)Talwade Bhamer11)Borkhind	11
7	**A 7 :** Retrogression /scouring in tail channel.	1)Jamlevani 2) Ghodegaon 3) Chichondi Patil 4) Kholghar 5) Haldani 6) Virkhel 7) Agnawati 8) Ghodambe 9) Bhadne 10) Mahirawani 11) Naigaon 12) Telanghashi	12
8	**A 14** : EDA / Stilling basin damaged/Hydraulic performance not good	1)Bhadne 2)Ambit 3) Kholghar 4) Telanghashi 5) Dhanibara 6) Ratnapur	06
9	**A 16** : Damages / foundation erosion/ scour/undermining observed in vicinity of flank walls/ guide walls/ junction walls/return walls	1) Shinde	01

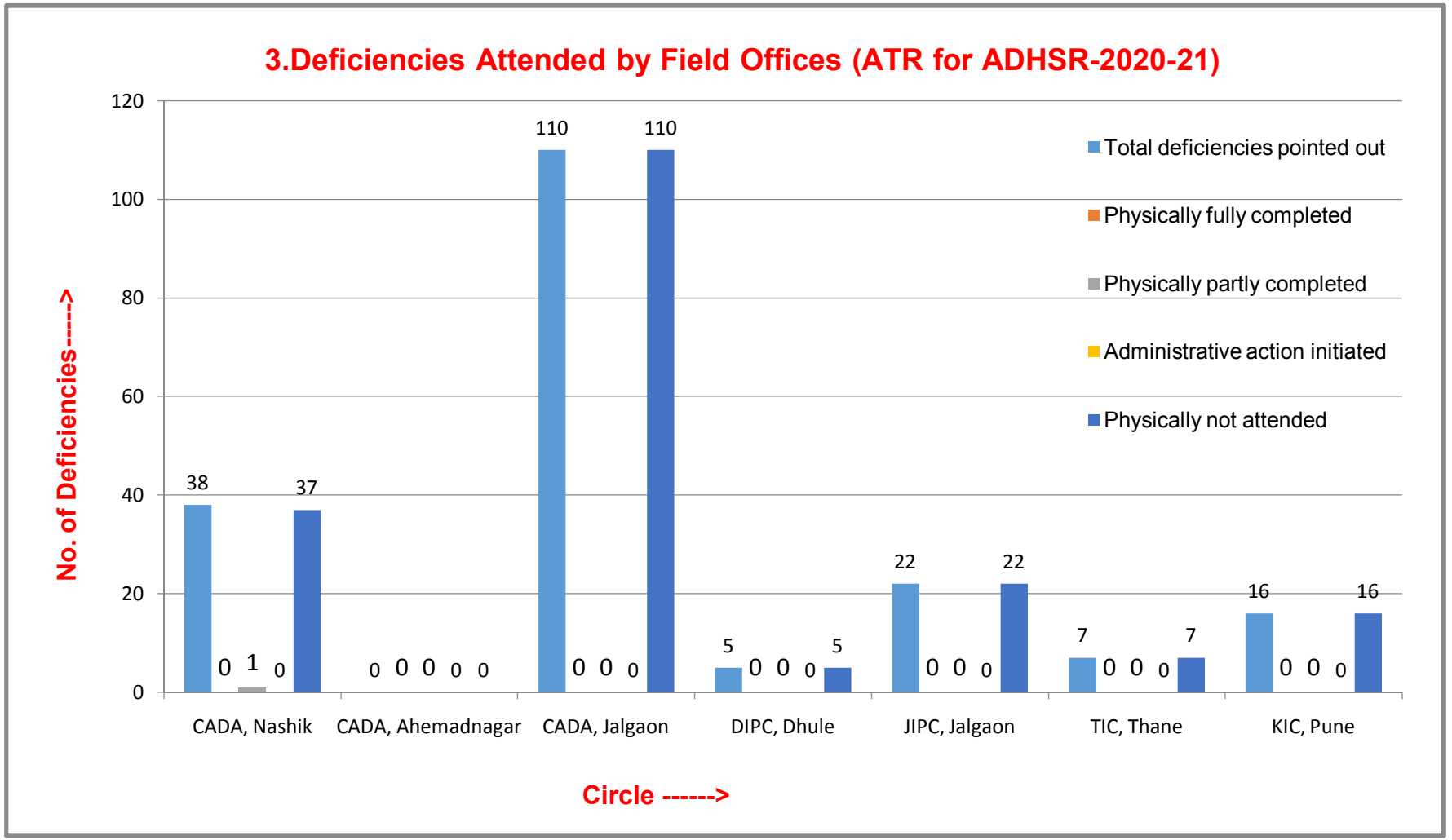
Sr. No	Deficiency	Names of dams	Total no of dams
1	2	3	4
10	**B 1** Dam section is not as per design	1) Talwade Bhamer 2) Aad 3) Ghodegaon 4) Mahirawani 5)Khaperkheda 6) Wakwad 7) Shelbari 8) Dhanibara 9) Khandlay 10) Khokasa 11) Chhawdi 12) Nandre13) Virkhel 14) Agnawati 15) Gadhad-deo 16) Ghodambe 17) Krushnapuri 18)Jamlevani	18
11	**B 3** : Considerable settlement of embankment / Rock toe/Pitching/ U/S & D/S slops, bulging/concavity of slopes	1)Borkhind 2) Jamlevani 3) Nandre 4) Wakwad 5) Mukti 6) Shelbari 7) Khandlay 8) Khokasa 9) Chhawdi 10) Haldani 11)Gadhad-deo 12) Kholghar 13) Virkhel 14) Shewade 16) Sur 17) Khaperkheda 18) Ratnapur 19) Ghodegaon 20)Chichondi Patil 21) Naigaon22) Telanghashi 23) Agnawati24) Talwade Bhamer25)Mahirawani	25
12	**B 4**: Longitudinal / Transverse cracks/ low area/sink holes/gully formation on top side slope of earthen dam	1) Ambikhalsa 2) Chhawdi 3) Ghodegaon 4) Naigaon	04
13	**B 5 :** Outlet gates not functioning properly. Stem rod is bent(Service gate/Emergency gate/Stop log gate/sluice gate)	1)Borkhind 2) Mahirwani 3) Bhadne 4) Mukti 5) Nandre 6) Khandlay 7) Chhawdi 8) Haldani 9) Dhanibara 10) Ratnapur 11)Chichondi Patil12) Naigaon 13)Telanghashi14)Sur15)Rajdhere 16)Agnawati17)Ghodambe 18)Talwade Bhamer19)Shinde20)Jamlevani 21)Virkhel	21

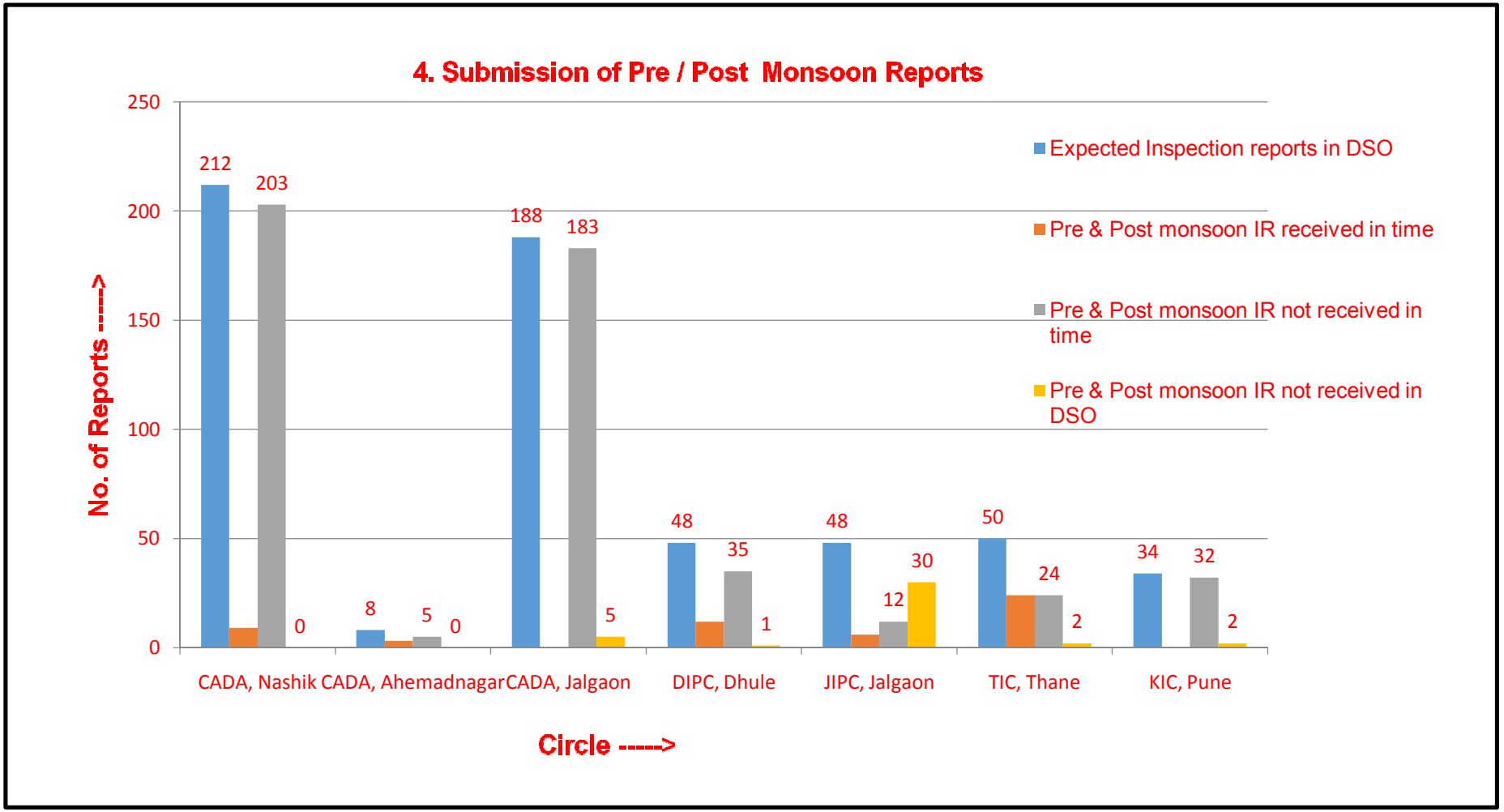
Sr. No	Deficiency	Names of dams	Total no of dams
1	**2**	**3**	**4**
14	**B 7**: Waste weir/waste weir bar not in good condition/coping damaged/leakage through waste weir	1)Mahirwani 2) Kholghar 3) Ratnapur 4) Ghodegaon 5) Wakwad 6) Dhanibara 7) Shelbari 8) Chhawdi 9) Gadhad-deo 10) Naigaon 11) Sur 12) Agnawati 13) Krushnapuri 14) Telanghashi 15) Rajdhere 16) Mukti 17) Haldani18)Ambikhalsa19)Ghodambe 20)Talwade Bhamer 21) Bhadne	20
15	**B 8** : Pointing on U/S face of dam not in good condition./deterioration spalling of concrete surface.	--	--
16	**B 12** : Damage to Rubber seals/Leakages through gates.	1) Gadhad-deo2) Agnawati3) Ambit4)Shinde	04


1. Dams in Districts of North Maharashtra Region
(Government Owned)
Class 1
Class-2
Class-3
No. of Dams ---->
0
10
20
30
40
50
60
70
80
90
24
89
20
13
34
36
10
32
14
8
36
5
14
34
76
NASHIK
AHMEDNAGAR
DHULE
NANDURBAR
JALGAON
District ----->
DSO-ADHSR-2021-2022/(NMR)
201

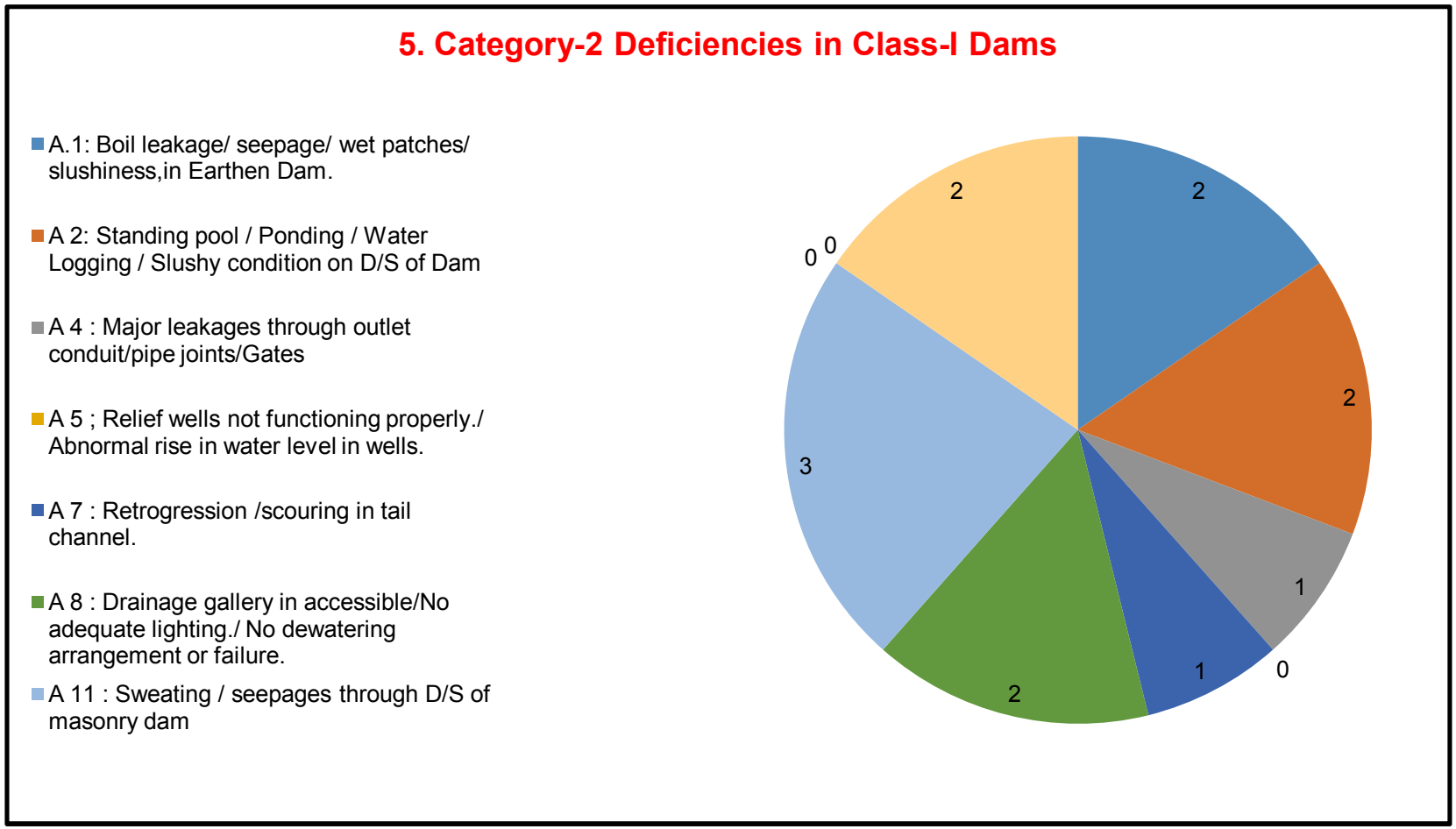
2. Dams in Districts of North Maharashtra Region (Private Owned)




3.Deficiencies Attended by Field Offices (ATR for ADHSR-2020-21)
No. of Deficiencies---->
120
100
80
60
40
20
0
38
0
1
0
37
0 0 0 0 0
110
0 0 0
110
5
0 0 0
5
22
0 0 0
22
7
0 0 0
7
16
0 0 0
16
CADA, Nashik
CADA, Ahemadnagar
CADA, Jalgaon
DIPC, Dhule
JIPC, Jalgaon
TIC, Thane
KIC, Pune
Circle ------>
Total deficiencies pointed out
Physically fully completed
Physically partly completed
Administrative action initiated
Physically not attended

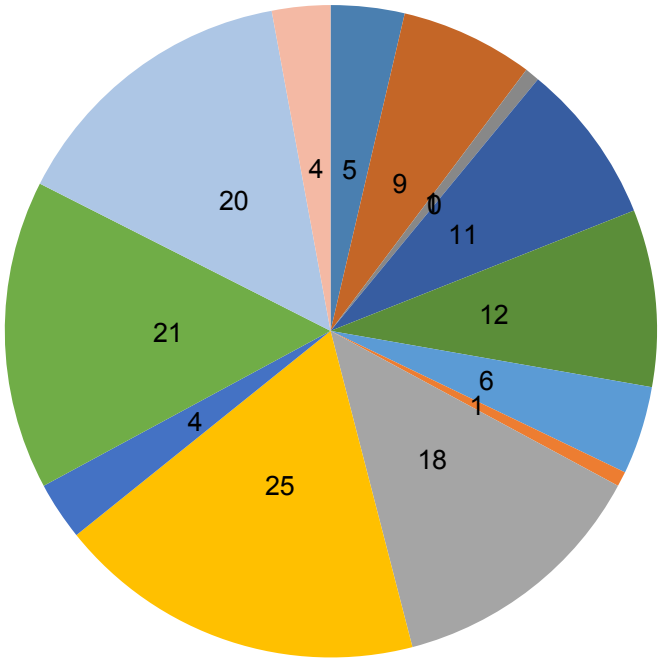

4. Submission of Pre / Post Monsoon Reports
250
200
150
100
50
0
No. of Reports ----->
212
203
0
8
5
0
188
183
5
48
35
1
48
12
30
50
24
2
34
32
2
CADA, Nashik
CADA, Ahemadnagar
CADA, Jalgaon
DIPC, Dhule
JIPC, Jalgaon
TIC, Thane
KIC, Pune
Circle ----->
Expected Inspection reports in DSO
Pre & Post monsoon IR received in time
Pre & Post monsoon IR not received in time
Pre & Post monsoon IR not received in DSO

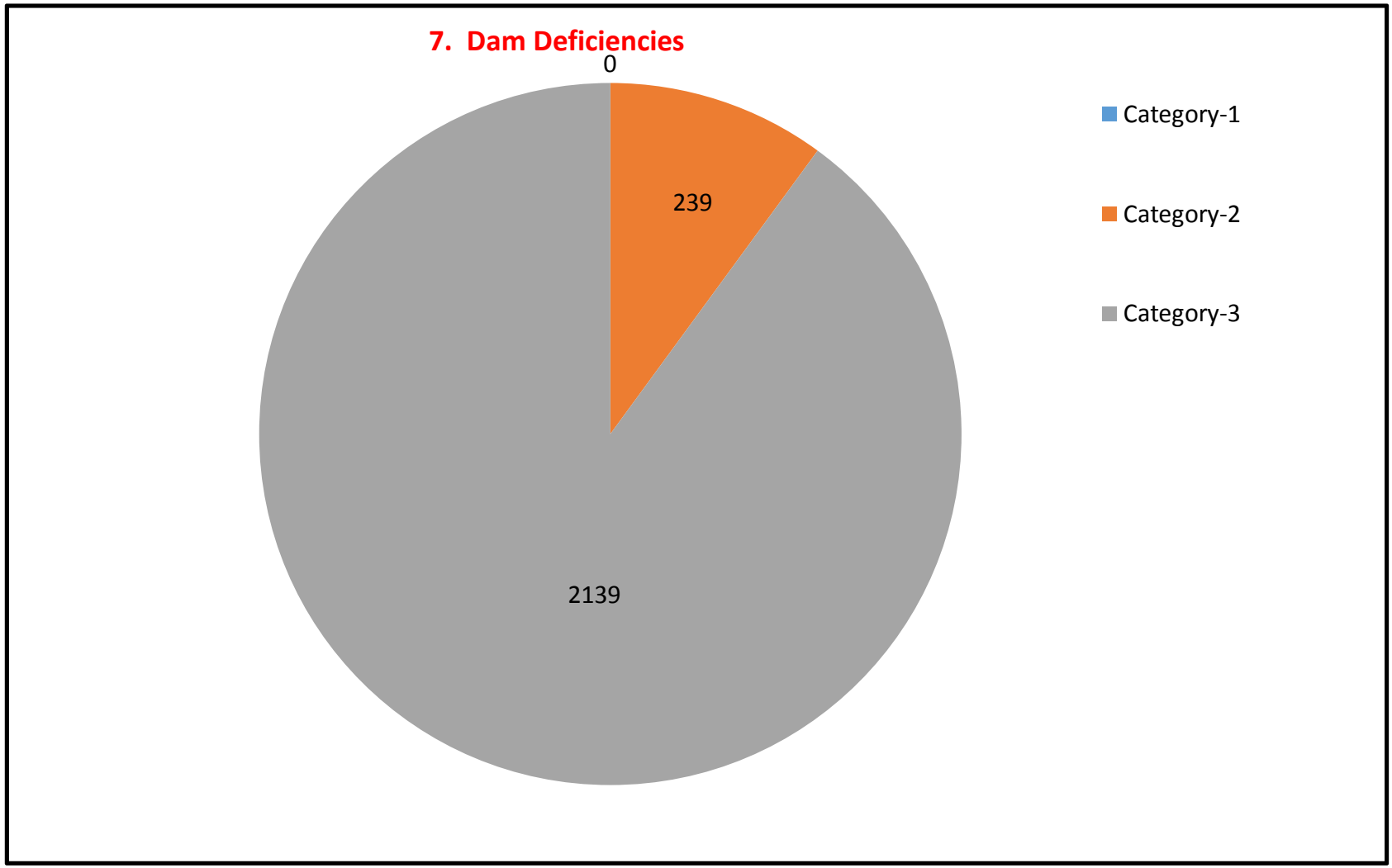
5. Category-2 Deficiencies in Class-I Dams



6. Category-2 deficiencies in Class-II dams

- A.1: Boil leakage/ seepage/ wet patches/ slushiness,in Earthen Dam.
- A 2: Standing pool / Ponding / Water Logging / Slushy condition on D/S of Dam
- A 3 : Leakages in vicinity of junction between earthen dam & masonry dam portion.
- A 5 ; Relief wells not functioning properly./ Abnormal rise in water level in wells.
- A 6 : 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
- B 1 Dam section is not as per design
- B 3 : Considerable settlement of embankment / Rock toe/Pitching/ U/S & D/S slops, bulging/concavity of slopes
- B 4: Longitudinal / Transverse cracks/ low area/sink holes/gully formation on top side slope of earthen dam




7. Dam Deficiencies
0
239
2139
Category-1
Category-2
Category-3

Annexure-2
Snapshots of Dams inspected by DSO

Snapshot-1
Bhegu Dam (Class I)
Tal- Kalwan Dist-Nashik
Date of inspection:05/01/2022
Rock toe stone is disturbed.(B3)

Snapshot -2
Girna Dam (Class II)
Tal- Nandgaon, Dist- Nashik
Date of inspection:25/03/2022
Leakage through pier near gate is observed.

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 North Maharashtra 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 487 have been installed on these 10 dams. Out of which 07 were working and 480 were not working i.e. 98.56 % instruments are in non working condition.
2) As for no dam instrument data reading are available so No Instrumentation data analysis report has been prepared for Nagpur 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.3.3.

Table No.4.1

Dam wise Status of Dam Instruments Installed on Large Dams (Nashik)

Sr. No.	Dam Name	Instrument Name	Date of Installation	Total	Functional Status (F/N.F)	
					Functional	Non Functional
1	**2**	**3**	**4**	**5**	**6**	**7**
Chief Engineer (W.R) N.M.R, Nashik						
1	Chankapur	Stand pipe piezometers	-	10	0	10
2	Ozarkhed	Twin tube piezometers	-	45	0	45
		Stand pipe piezometers	-	2	0	2
		Earth pressure cell	-	4	0	4
		Vertical Settlement gauge	-	2	0	2
3	Karanjwan	Twin tube piezometers		24	0	24
		Stand pipe piezometers	-	14	0	14
		Horizontal & Vertical movement gauge	-	3	0	3
4	Bhojapur	Stand pipe piezometers	-	7	0	7
5	Gangapur	Twin tube piezometers	-	91	0	91
		Stand pipe piezometers	-	11	0	11
6	Adhala	Stand pipe piezometers	-	11	0	11

Sr. No.	Dam Name	Instrument Name	Date of Installation	Total	Functional Status (F/N.F)	
					Functional	Non Functional
1	**2**	**3**	**4**	**5**	**6**	**7**
7	Bhandardara	Standpipe piezometers	1970-71	13	0	13
		Uplift pressure cells	1970-71	2	2	0
		Plumb bob	1970-71	1	0	1
8	Mula	Stand pipe piezometer	1970	15	5	10
		Twin tube piezometer	1970	42	0	42
		Uplift pressure cells	1970	16	0	16
		Plumb bob	1970	2	0	2
		Settlement guages	1970	2	0	2
CE Wise Total for 8 Dams				**317**	**7**	**310**
Chief Engineer T.I.D.C. Jalgaon						
9	Girna	Stand pipe	1969	26	0	26
		Twin tube piezometers	1969	69	0	69
		Vertical settlement guage	1969	3	0	3
10	Karwand	Twin tube piezometers	-	72	0	72
		CE Wise Total for 2 Dams		**170**	**0**	**170**
		NMR Region Total for 10 Dams		**487**	**7**	**480**

TABLE NO 4.2

Mortality Status of Instruments installed on Large Dams (Nashik)

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	109	05	104	95.41
2	Twin tube piezometers	343	0	343	100
3	Horizontal/Vertical device / Cross arm surface settlement plug	10	0	10	100
4	Earth pressure cells	4	-	4	100
5	Slope indicator	-	-	-	-
Total		**466**	**05**	**461**	**98.93**
(B) Masonry Dams					
1	Pore pressure meters	-	-	-	-
2	Stressmeter	-	-	-	-
3	Strainmeter/ No stress-strain meter	-	-	-	-
4	Uplift pressure cells	18	0	18	100
5	Plumb bob/ Inverted Plumb Bob / co-ordimeter	3	0	3	100
6	Long Gauge extensometer, Multiple Bore hole extensometer	-	-	-	-
7	Thermometers	-	-	-	-
8	Jointmeters /Dial Gauge	-	-	-	-
9	Tiltmeter	-	-	-	-
Total		**21**	**00**	**21**	**100.00**

	Instruments in	Total	Working	Non Working	Mortality
A)	Earth Dams	**466**	**05**	**461**	**98.93**
B)	Masonry Dams	**21**	**00**	**21**	**100**
	Grand Total	**487**	**05**	**482**	**98.97**

Table No. 4.3

Comparative Statement for Status of Instruments in Dams

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) N.M.R, Nashik	8	318	7	311	2.20	8	317	07	310	1.58
2	Chief Engineer T.I.D.C. Jalgaon	2	170	0	170	0.00	2	170	0	170	0.00
	Total	**10**	**488**	**7**	**481**	**1.43**	**10**	**487**	**07**	**480**	**1.43**

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 center 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 4.1 gives the dam wise 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 North Maharashtra region it is seen that 176 various meteorological instruments installed on dams out of which 140 are functioning and 36 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

DAM WISE STATUS OF METEOROLOGICAL INST RUMENTS INSTALLED ON DAMS

Sr. No.	Name of dam	Name of instruments	Total	Performance		Remarks
				Working	Not working	
1	2	3	4	5	6	7
1	Gangapur	1)Rain Gauge on Dam	1	0	1	
		3) Rain Gauge in catchment	3	0	3	
		3) Pan Evaporimeter	1	1	0	
2	Darna	1)Rain Gauge on Dam	2	2	0	
		2) Pan Evaporimeter	1	1	0	
		4) Rain Gauge in catchment	2	2	0	
		6) Automatic water level recorder	1	1	0	
3	Karwa	1)Rain Gauge on Dam	1	1	0	
		2) Rain Gauge on Dam	1	1	0	
		4)pan evaporimeter	1	1	0	
4	Rameshwar	1)Rain Gauge on Dam	1	1	0	
5	Chankapur	1)Rain Gauge on Dam	1	1	0	
		2)Pan evaporimeter	1	0	1	
		4) Rain Gauge in the catchments	3	0	3	
6	Ozarkhed	1)Rain Gauge on Dam	1	1	0	
		4)Pan Evaporimeter	1	1	0	
7	Karanjwan	1) Rain Gauge on Dam(ordinary)	2	2	0	
		2)RainGauge in the catchment (Ordinary)	4	2	2	
		4) Pan evaporimeter	1	1	0	
8	Waghad	1) Rain Gauge on Dam(ordinary)	1	1	0	
		4)Pan Evaporimeter	1	1	0	
9	Palkhed	1)Rain Gauge on Dam	1	1	0	
		3) Pan evaporimeter	1	1	0	
10	Punegaon	1)Rain Gauge on Dam	2	2	0	
		3) RainGauge in the catchment	2	0	2	
		4) Pan evaporimeter	1	1	0	
11	Gautami	1)Rain Gauge on Dam	1	1	0	
		2) Pan Evaporimeter	1	1	0	
12	Bhojapur	1)Rain Gauge on Dam	1	1	0	
		2) Rain Gauge in catchment	1	0	1	
		3) pan Evaporimeter	1	1	0	
13	Haranbari	1)Rain Gauge on Dam	1	1	0	
		2) Rain Gauge in catchment	1	1	0	
		4) Pan Evaporimeter	1	0	1	
14	Bori (Ambedari)	1)Rain Gauge on Dam	1	0	1	

Sr. No.	Name of dam	Name of instruments	Total	Performance		Remarks
				Working	Not working	
1	2	3	4	5	6	7
15	Alandi	1)Rain Gauge on Dam	2	2	0	
16	Kelzar	1)Rain Gauge on Dam	1	0	1	
		2) Rain Gauge in catchment	1	1	0	
		3) pan evaporimeter	1	0	0	
17	Punand	1) Rain Gauge on Dam	1	1	0	
18	Mukane	1) Rain Gauge on Dam	2	2	0	
		3) pan evaporimeter	1	0	1	
		3) wind velocity recorder	1	1	0	
		4) wet dry bulb thermometer	1	1	0	
19	Waldevi	1)Raingauge in catchment	1	1	0	
		1) Rain Gauge on Dam	1	1	0	
20	Kashyapi	1)Rain Gauge on Dam	1	0	1	
		2) Pan evaporimeter	1	1	0	
		3) Rain Gauge in catchment	2	0	2	
		4) Automatic water level recorder	1	1	0	
21	Bhavali	1)Rain Gauge on Dam	1	1	0	
		2) Pan evaporimeter	1	1	0	
22	Waghur	1) Rain Gauge in catchment (self recorder)	2	2	0	
		2)Rain Gauge on Dam (ordinary)	1	1	0	
		3)Rain Gauge in catchment (ordinary)	15	15	0	
		4)) Pan Evaporimeter	1	0	1	
23	Aner	1) Rain Gauge in catchment	1	1	0	
		2)Rain Gauge on Dam	1	1	0	
24	Karwand	3) Rain Gauge on Dam	1	1	0	
25	Panzara	1)Rain Gauge on Dam	1	1	0	
26	Sonwad	1)Rain Gauge on Dam	1	1	0	
27	Akkalpada	1)Rain Gauge on Dam	1	0	1	
28	Shrimant	1) Rain Gauge on Dam	1	1	0	
29	Rangawali	1)Rain Gauge on Dam	1	1	0	
30	Amravati	1)Rain Gauge on Dam	1	0	1	
31	Koradinala	1)Rain Gauge on Dam	1	0	1	
		2) Rain Gauge in catchment	1	1	0	
32	Nagan	1)Rain Gauge on Dam	1	1	0	
33	Shivan	1) Rain Gauge on dam	1	1	0	
34	Mangrul	1) Pan Evaporimeter	1	1	0	
		2) Water level recorder	1	1	0	
35	Bahula	1)) Pan Evaporimeter	1	0	1	
		2)Rain Gauge on Dam	1	0	1	

Sr. No,	Name Of Dam	Name Of Instrument	Total	Performance		Remarks
				Working	Non Working	
1	2	3	4	5	6	7
36	Girna	1)Rain Gauge on Dam	1	1	0	
		2) Rain Gauge in catchment	8	8	0	
		3) pan evaporimeter	1	1	0	
37	Anjani	1)Rain Gauge on Dam	2	2	0	
		2)) Pan Evaporimeter	1	0	1	
		4) Rain Gauge in catchment	1	1	0	
38	Gul	1) Rain Gauge on Dam	2	2	0	
		2) Rain Gauge in catchment (self recorder)	1	1	0	
39	Suki	1) Raingauge on dam	1	1	0	
40	Manyad	1)Rain Gauge on Dam	1	1	0	
		2) Rain Gauge in catchment	2	2	0	
41	Bori	1)Rain Gauge on Dam	1	1	0	
		2) Pan Evaporimeter	1	0	1	
42	Agnawati	1)Rain Gauge on Dam	1	1	0	
		2) Pan Evaporimeter	1	1	0	
43	Charthana	1) Raingauge on dam	1	1	0	
44	Hiwara	1) Raingauge on dam	1	1	0	
45	Tondapur	1) Raingauge on dam	1	1	0	
46	Sarvapimpari	1) Raingauge on dam	1	1	0	
47	Lahasar	1) Raingauge on dam	1	1	0	
48	Abhora	1) Raingauge on dam	1	1	0	
49	Pimpari	1) Raingauge on dam	1	1	0	
50	Hatnoor	1) Rain Gauge on Dam	1	1	0	
		2)Pan Evaporimeter	1	1	0	
51	Waghur	1)Rain Gauge on Dam	1	1	0	
52	Mor	1)Rain Gauge on Dam	1	1	0	
		2) Rain Gauge in catchment	1	0	1	
		3)Water level recorder	1	1	0	
53	Sina	1)Rain Gauge on Dam	1	1	0	
		2) Pan Evaporimeter	1	1	0	
		3) Wind velocity recorder	1	1	0	
		4)Wind direction recorder	1	1	0	
		5)wet/dry bulb thermometer	1	1	0	

Sr. No,	Name Of Dam	Name Of Instrument Total		Performance		Remarks
				Working	Non Working	
1	2	3	4	5	6	7
54	Mula	1) Rain Gauge on Dam	2	2	0	
		2) Rain Gauge in catchment	1	1	0	
		3) Pan Evaporimeter	1	1	0	
		4) Wind velocity recorder	1	0	1	
		5)Wind direction recorder	1	0	1	
		6)wet/dry bulb thermometer	1	0	1	
55	Mandohol	1)Rain Gauge on Dam	1	1	0	
56	Visapur	1)Rain Gauge on Dam	1	1	0	
		2) Rain Gauge in catchment	1	1	0	
57	Adhala	1)Rain Gauge on Dam	1	1	0	
		2) Pan Evaporimeter	1	0	1	
58	Bhandardara	2) Rain Gauge in catchment	3	3	0	
		2) Rain Gauge on Dam	1	1	0	
		3) Pan evaporimeter	1	1	0	
59	Bhatodi	1)Rain Gauge on Dam	1	0	1	
60	Nilwande	1) Rain Gauge in catchment	5	4	1	
61	Waki	1)Rain Gauge on Dam	1	1	0	
62	Bham	1)Rain Gauge on Dam	1	1	0	
63	Kalu	1)Rain Gauge on Dam	1	1	0	
		2) Rain Gauge in catchment	3	3	0	
		3) Pan evaporimeter	1	1	0	
			176	140	36	

Table No. 5.2

Status of Meteorological instruments Mortality

Sr. No.	Type of Instruments	Number Of Instruments			
		Total	Working	Non-Working	Mortality (%)
1	2	3	4	5	6
1	Rain gauge on dam	70	61	9	12.85
2	Rain gauge in catchment	65	50	15	23.65
3	Pan Evaporimeter	29	20	8	27.58
4	Wind velocity recorder	3	2	1	33.33
5	Wind direction recorder	2	1	1	50.00
6	Wet/dry bulb thermometer	3	2	1	33.33
7	Thermometer for air jump				0.00
8	Thermometer for reservoir water temp				0.00
9	Water stage recorder	4	4	0	0.00
10	Barometer				0.00
11	Sun shine recorder				0.00
12	Max & Min thermometer				0.00
13	Wave height recorder				0.00
14	Hydrometer				0.00
15	Humidity Meter				0.00
16	Automatic level controller				0.00
17	Steven meter				0.00
18	DWLL				0.00
19	Other Meteorological Instruments				0.00
Total		**176**	**140**	**36**	**19.88**

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 Guidelines circulated by C.W.C., New Delhi's vide letter no. 3/19/NCDS/Guidelines EAP/DSM/2004/233-67, Dtd. 17 May 2006.CWC Guidelines are available on http://www.cwc.gov.in/main/downloads /cwc/EAP chapters.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

NORTH MAHARASHTRA REGION NASHIK					
Status of Emergency Action Plan (EAP)					
Sr.No	**Name of C.E.**	**Total Dam**	**Received**	**Not Received**	**Remark**
1	C.E. NMR, Nashik	33	15	18	
2	C.E.TIDC, Jalgaon	35	19	16	
3	C.E, S.P, Pune (NMR Region)	0	0	0	
4	C.E, W.R, Konkan (NMR Region)	1	0	1	
5	Private Dams in NMR Region	1	0	1	
	Total	**70**	**34**	**36**	

Table – 6.2

Status of Reservoir Operation Schedule (ROS)					
					Gated Dams =34
Sr.No	**Name of C.E.**	**Total Dam**	**Received**	**Not Received**	**Remark**
1	C.E. NMR, Nasik	15	12	3	
2	C.E.TIDC, Jalgaon	20	17	3	
3	C.E, S.P, Pune (NMR Region)	--	--	--	
4	C.E, W.R, Konkan (NMR Region)	--	--	--	
5	Private Dams in NMR Region	1	0	1	
	Total	**36**	**29**	**7**	

Table – 6.3

Status of Gate Operation Schedule (GOS)					
Sr.No	**Name of C.E.**	**Total Dam**	**Received**	**Not Received**	**Remark**
1	C.E. NMR, Nasik	15	12	3	
2	C.E.TIDC, Jalgaon	20	17	3	
3	C.E, S.P, Pune (NMR Region)	--	--	--	
4	C.E, W.R, Konkan (NMR Region)	--	--	--	
5	Private Dams in NMR Region	1	0	1	
	Total	**36**	**29**	**7**	

Table-6.4

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

R = Received, NR = Not Received, UG = Un Gated				
Sr.No.	Name of Dam	EAP	ROS	GOS
1	2	3	4	5
North Maharashtra Region				
A) Chief Engineer, North Maharashtra Region,Nashik				
I) Superintending Engineer,North Maharashtra Region,Nashik				
1) Executive Engineer, Nashik Irrigation Division, Nashik				
1	Bhojapur	NR	UG	UG
2	Bavali	NR	UG	UG
3	Darna	R(1997)	R(2018)	R(2018)
4	Gangapur	NR	R(2018)	R(2018)
5	Gautami Godavari	R(2010)	R(2018)	R(2018)
6	Kadwa	R(1997)	R(2018)	R(2018)
7	Kashyapi	R(2004)	R(2018)	R(2018)
8	Mukane	R(2003)	R(2018)	R(2018)
9	Waldevi	R(2004)	UG	UG
2) **Executive Engineer, Palkhed Irrigation Division, Nashik**				
10	Karanjwan	R(1996)	R(2018)	R R(2017)
11	Palkhed	R(1998)	R(2018)	R(2017)
12	Wagad	R(1997)	UG	UG
13	Punegaon	NR	R(2018)	R(2017)
14	Ozarkhed	R(1997)	UG	UG
3) **Executive Engineer, Ahamadnagar Irrigation Division, Nashik**				
15	Adhala	NR	UG	UG
16	Balthan	NR	UG	UG
17	Bhandardara	NR	UG	UG
18	Ghoti (Shilwandi)	NR	UG	UG
19	Kothale	NR	UG	UG
20	Padoshi	NR	UG	UG
21	Shirpunje	NR	UG	UG
22	Kalu(Bruhat)	NR	NR	NR
23	Tatvi	NR	UG	UG
4) **Executive Engineer, Malegaon Irrigation Division, Malegaon**				
24	Bhegu	R(2008)	UG	UG
25	Chankapur	R(2007)	R(2018)	R(2017)
26	Haranbari	R(1996)	UG	UG
27	Kelzar	R(1997)	UG	UG
5) **Executive Engineer, Mula Irrigation Division, Ahamadnagar**				
28	Mula	R(1996)	R(2018)	R(2017)

Dam wise Position of EAP, ROS, GOS Documents Class - I Dams				
			R = Received, NR = Not Received, UG = Un Gated	
Sr.No.	Name of Dam	EAP	ROS	GOS
1	2	3	4	5
	B) S.E. CADA, Ahmadnager			
1) Executive Engineer, UPPD,SANGAMER				
29	Nilwande	NR	R(2018)	R(2018)
30	Bham	NR	NR	NR
	Received	16	13	13
	Not Received	14	2	2
	Un Gated	0	15	15
	Total	30	30	30
II)	**CE, T.I.D.C. Jalgaon**			
	A)Superitendibg Engineer & Adm CADA Jalgaon			
1) **Executive Engineer, Dhule Irrigation Division, Dhule**				
1	Burai	R(1983)	UG	UG
2	Karwand	R(1997)	UG	UG
3	Panzara	R(1998)	UG	UG
4	Ranipur	R(2015)	UG	UG
5	Sonwad	R(2015)	R(2015)	R(2015)
6	Jamkhedi	R(2015)	UG	UG
7	Aner	R(1997)	R(2008)	R(2008)
8	Amarawati	NR	R(2008)	R(2008)
9	Prakasha Barrage	NR	R(2009)	R(2009)
10	Sarangkheda Barrage	NR	R(2009)	R(2009)
2) Executive Engineer, Jalgaon Irrigation Division, Jalgaon				
11	Suki	R(1998)	UG	UG
12	Mangrul (Bhokar)	NR	UG	UG
13	Mor	R(2008)	R(2007)	R(2007)
14	Bahula	R(2004)	R(2008)	R(2008)
15	Hatnur	R(1997)	R(2008)	R(2008)
3)Executive Engineer, Girna Irrigation Division, Jalgaon				
16	Girna	R(1969)	R(2008)	R(2008)
17	Bori	R(2003)	R(2008)	R(2008)
18	Manyad	R(1996)	UG	UG
	B) S.E.J.I.P.C. Jalgaon			
1)Executive Engineer, Minor Irrigation Division, Jalgaon				
19	Waghzira	NR	UG	UG
20	Nimbadevi	NR	UG	UG
21	Borkheda	NR	UG	UG
22	Haripura	NR	UG	UG

Sr.No.	Name of Dam	EAP	ROS	GOS
1	2	3	4	5
2)Executive Engineer, Jalgaon Medium Project Div No1, Jalgaon				
23	Anjani	R(2008)	R(2009)	R(2009)
24	Gul	R(2014)	R(2009)	R(2009)
3) **Executive Engineer, Waghur Dam Div ,Jalgaon**				
25	Waghur	NR	R(2009)	R(2009)
	C)S.E, D.I.P.C.Dhule			
1) Executive Engineer, Nandurbar Medium Project Div No 2, Nandurbar				
26	Susari	NR	R(2008)	R(2008)
27	Dara	NR	UG	UG
28	Shivan (virchek)	R	R(2008)	R(2008)
29	Kordi (Nalla)	NR	UG	UG
2)Executive Engineer, Girna River Valley Project Div, Nashik				
30	Manikpunj	NR	UG	UG
31	Punand	R	NR	NR
3)Executive Engineer, Dhule Medium Project Div , Dhule				
32	Wadi Shewadi	NR	R(2009)	R(2009)
33	Akkalpada (Lower Panzara)	NR	NR	NR
34	Sulwade Barrage	NR	R(2009)	R(2009)
35	Nagan	R(2016)	NR	NR
	Received	19	17	17
	Not Received	16	03	3
	Un Gated	0	15	15
	Total	35	35	35
III)	C.E, W.R, Konkan, Mumbai (NMR Region)			
	S.E, TIC, Thane			
1)Executive Engineer, Minor Irrigation Division, Nashik				
1	Shrimant	NR	UG	UG
	Received	0	0	0
	Not Received	1	0	0
	Un Gated	0	1	1
	Total	1	1	1
Private Dam				
1	Chehedi	NR	NR	NR
	Received	0	0	0
	Not Received	1	1	1
	Total	1	1	1

Table-6.5 Status of Other NCDS Documents (Class-I Dams)										
Sr. No.	Name of C.E.	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	C.E. NMR, Nasik	30	6	24	16	14	14	16	13	17
2	C.E.TIDC, Jalgaon	35	7	28	11	24	9	26	7	28
3	C.E, S.P, Pune (NMR Region)	1	0	1	1	0	1	0	0	1
4	C.E, W.R, Konkan (NMR Region)	1	0	1	0	1	0	1	0	1
5	Private Dams in NMR Region	1	0	1	0	1	0	1	0	1
Total For NMR Region		**68**	**13**	**55**	**28**	**40**	**24**	**44**	**20**	**48**

Table-6.6

Dam Wise Status of Other NCDS Documents

Sr. No	Name Of Dam	Completion Report	Record Drawing	Data Book	O & M manual	Remark
	GMIDC					
I)	**C.E., NMR, Nashik**					
	A) S.E., CADA, Nashik					
1) Executive Engineer, Nashik Irrigation Division, Nashik						
1	Bhojapur	NR	R	R	NR	
2	Bavali	NR	NR	NR	NR	
3	Darna	R	R	R	R	
4	Gangapur	R	R	NR	NR	
5	Gautami Godavari	NR	NR	NR	NR	
6	Kadwa	NR	R	R	R	
7	Kashyapi	NR	NR	NR	NR	
8	Mukane	NR	R	NR	NR	
9	Waldevi	NR	NR	NR	NR	
2) Executive Engineer, Palkhed Irrigation Division, Nashik						
10	Karanjwan	R	R	R	R	
11	Palkhed	NR	R	R	R	
12	Wagad	NR	R	R	R	
13	Punegaon	NR	NR	NR	NR	
14	Ozarkhed	NR	R	R	R	
3) **Executive Engineer, Ahemadnagar Irrigation Division, Ahemadnagar**						
15	Adhala	R	R	R	R	
16	Balthan	NR	NR	NR	NR	
17	Bhandardara	R	R	R	R	
18	Ghoti (Shilwandi)	NR	NR	NR	NR	
19	Kothale	NR	NR	NR	NR	
20	Padoshi	NR	NR	NR	NR	
21	Shirpunje	NR	NR	NR	NR	
22	Kalu(Bruhat)	NR	NR	NR	NR	
23	Tatvi	NR	NR	NR	NR	
4) Executive Engineer, Malegaon Irrigation Division, Malegaon						
24	Bhegu	NR	R	R	R	
25	Chankapur	R	R	R	R	
26	Haranbari	NR	R	R	R	
27	Kelzar	NR	R	R	R	
4) **Executive Engineer, Mula Irrigation Division, Ahemadnagar**						
28	Mula	NR	R	R	R	

Sr. No	Name Of Dam	Completion Report	Record Drawing	Data Book	O & M manual	Remark
GMIDC						
C.E., NMR, Nashik						
A) S.E., CADA, Ahemadnagar						
1) **Executive Engineer, Uppar Prawara Dam Division,Sagamner**						
29	Nilwande	NR	NR	NR	NR	
30	Bham	NR	NR	NR	NR	
	Received	6	16	14	13	
	Not Received	24	14	16	17	
	Ungated	0	0	0	0	
	Total	30	30	30	30	
IIC.E., T.I.D.C. Jalgaon						
A) S.E., CADA Jalgaon						
1) **Executive Engineer,Dhule Irrigation Div Dhule**						
31	Amarawati	NR	NR	NR	NR	
32	Prakasha Barrage	NR	NR	NR	NR	
33	Sarangkheda Barrage	NR	NR	NR	NR	
B) S.E., J.I.P.C. Jalgaon						
1) **Executive Engineer,Minor Irrigation Div Jalgaon**						
	Waghzira	NR	NR	NR	NR	
	Nimbadevi	NR	NR	NR	NR	
	Borkheda	NR	NR	NR	NR	
	Haripura	NR	NR	NR	NR	
2) **Executive Engineer,Medium Project Div Jalgaon**						
	Anjani	NR	NR	NR	NR	
	Gul	NR	NR	NR	NR	
3) **Executive Engineer,Waghur Dam Div jalgaon**						
	Waghur	NR	NR	NR	NR	
C) S.E., D.I.P.C.Dhule						
1) **Executive Engineer,Nandurbar Medium Project Div Nandurbar**						
	Susari	NR	NR	NR	NR	
	Dara	NR	NR	NR	NR	
	Shivan	NR	NR	NR	NR	
	Kordi	NR	NR	NR	NR	
2)Executive Engineer, Girna River Valley Project Div ,Nashik						
	Manikpunj	NR	NR	NR	NR	
	Punand	NR	NR	NR	NR	

Sr. No	Name Of Dam	Completion Report	Record Drawing	Data Book	O & M manual	Remark
3) **Executive Engineer, Dhule Medium Project Div ,Dhule**						
	Wadi Shewadi	NR	NR	NR	NR	
	Akkalpada (Lower Panzara)	NR	NR	NR	NR	
	Sulwade Barrage	NR	NR	NR	NR	
	Nagan	NR	NR	NR	NR	
	Received	7	11	9	7	
	Not Received	28	24	26	28	
	Un Gated	0	0	0	0	
	Total	35	35	35	35	
III C.E, W.R, Konkan, Mumbai (NMR Region)						
S.E, TIC, Thane						
1) **Executive Engineer, Minor Irrigation Division ,Nashik**						
1	Shrimant	NR	NR	NR	NR	
	Received	0	0	0	0	
	Not Received	1	1	1	1	
	Un Gated	0	0	0	0	
	Total	1	1	1	1	
Private Dams						
1	**Nashik Municipal Corporation**					
1	Chehedi	NR	NR	NR	NR	
	Received	0	0	0	0	
	Not Received	1	1	1	1	
	Un Gated	0	0	0	0	
	Total	1	1	1	1	

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 dame health.

Design and Development-

DHARMA software will 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.

DHARMA Application User Registration Form

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 thatIwillnotusetheinformationcollectedfromDHARMAsoftwareforanyunlawfulactivitiesand/orto 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.

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 (%)
1	2	3	4
[1] Chief Engineer ,NMR,Nashik **(1) Superintending Engineer & Adm., CADA, Nashik** **(a) Executive Engineer,NID,Nashik**			
1	Bhojapur	MH09HH0313	11
2	Gangapur	MH09HH0113	22
3	Mukane	MH09MH1380	11
4	Waldevi	MH09HH1376	10
5	Kashyapi	MH09HH1479	11
6	Gautami Godavari	MH09HH1778	11
7	Bhavali	MH09HH1789	11
8	Darana	MH09MH0037	27
9	Karawa	MH09MH1444	27
(b) Executive Engineer, PID,Nashik			
10	Ozarkhed	MH09HH0943	23
11	Punegaon	MH09MH1486	11
12	Waghad	MH09HH0797	12
13	Palkhed	MH09HH0532	11
14	Karanjwan	MH09HH0454	09
(C) Executive Engineer, AID,Ahamadnagar			
15	Adhala	MH09HH0594	11
16	Kothale	MH09MH1938	10
17	Titavi	MH09HH1941	11
18	Shirpunje	MH09HH1940	11
19	Ghoti Shilwandi	MH09HH1937	11
20	Padoshi	MH09HH1939	11
21	Kalu(Bruhat)	--	00
22	Bhadardara	MH09HH0013	60
23	Balthan	MH09MH1936	11
24	Nandurmadhmeshwar	--	--
25	Pimpalgaon khand	--	--
26	Waki	--	--
(d) **Executive Engineer,** MID,Malegaon			
27	Kelzar	MH09HH0896	11
28	Bhegu	MH09HH1540	11
29	Haranbari	MH09HH0842	11
30	Chankapur	MH09HH0028	25
(e) **Executive Engineer,** MID,Ahamadnagar			
31	Mula	MH09HH0316	03

Sr. No	Name of Dam	NRLD registration number	Dharma data filling status (%)
1	2	3	4
2) **Superintending Engineer & Adm.,** CADA, Ahamadnagar a) **Executive Engineer** Upper Pravara Dam div, Sangamner			
32	Nilwande	MH09HH1942	11
33	Bham	MH09HH1761	10
[2]CE, TIDC, Jalgaon **(1) Superintending Engineer, DIPC, Dhule** **(a) Executive Engineer, NMPD 2, Nandurbar**			
34	Susari	MH09MH1950	10
35	Dara	MH09HH1797	11
36	Shivan Virchek	MH09MH1748	11
37	Kordinala	MH09MH1094	11
(b) **Executive Engineer** DMPD, Dhule			
38	Wadi Shewadi	MH09HH1815	11
39	Sulwade Barrage	MH09MH1814	11
40	Nagan	MH09MH1791	11
41	Akkalpada	MH09HH1795	11
(c) **Executive Engineer** GRVPD, Nashik			
42	Manikpunj	MH09HH1786	11
43	Punand	MH09MH1820	11
(2) **Superintending Engineer & Adm**, CADA, Jalgaon (a) **Executive Engineer** DID, Dhule			
44	Amravati	MH09MH1644	10
45	Sarangkheda Barrage	MH09HH1770	03
46	Prakasha Barrage	MH09HH1810	11
47	Burai	MH09HH1009	11
48	Karwand	MH09HH0226	11
49	Panzara	MH09MH0385	11
50	Ranipur	MH09HH1481	11
51	Aner	MH09HH0741	82
52	Sonwad	MH09MH1487	11
53	Jamkhedi	MH09MH1593	11
(b) Executive Engineer, JID, Jalgaon			
54	Suki	MH09HH0656	10
55	Bhokar	Not Available	00
56	Bahula	MH09MH1445	00
57	Mor	MH09HH1619	11
58	Hatnur	MH09MH0948	11
(c) **Executive Engineer,** GID, Jalgaon			
59	Girana	MH09MH0196	10
60	Manyad	MH09HH0387	16
61	Bori	MH09MH0659	11

Sr. No	Name of Dam	NRLD registration number	Dharma data filling status (%)
1	2	3	4
(3) Superintending Engineer,JIPC,Jalagon			
(a) Executive Engineer, MID,Jalgaon			
62	Waghzira	MH09HH1659	10
63	Nimbadevi	MH09HH1660	11
64	Borkheda	MH09HH1658	11
65	Haripura	MH09HH1956	11
(b) Executive Engineer,JMPD 1,Jalgaon			
66	Anjani	MH09MH1954	10
67	Gul	MH09HH1955	11
(c) Executive Engineer,Waghur Dam Div,Jalgaon			
68	Waghur	MH09LH1750	10
[3]CE,WR,Kokan ,Mumbai **(1) Superintending Engineer, TIC, Thane** **(a) Executive Engineer,MID,Nashik**			
69	Shrimant	MH09HH2037	11

DHARMA

Integrated Approach for Asset Management of Dams in India

Information Bulletin No.4 January 2019

INSIDE

The Dam Health and Rehabilitation Monitoring Application (DHARMA)

is being developed as a part of the institutional strengthening component of the Dam Rehabilitation and Improvement Project (DRIP). DRIP is an initiative undertaken by the Ministry of Water Resources, River Development and Ganga Rejuvenation, Government of India with the financial assistance of The World Bank.

DHARMA has been designed and developed to enhance the capacity of individuals and organisations throughout India to manage their dam assets scientifically and professionally so as to sustain advantages of dams. This Information Bulletin No.4 has been prepared by the Central Project Management Unit (CPMU) to present an overview of the purpose and content of the software.

Project DRIP Dam Rehabilitation & Improvement Project

Financial Assistance THE WORLD BANK IBRD • IDA | WORLD BANK GROUP

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What is DHARMA?

Introduction

There are 5264 large dams in operation in India and 437 are under construction. In addition, there are several thousand smaller dams. All these dams are vital for ensuring the water security of the country in a sustainable manner and regulating water during the rainy season to prevent floods.

Today, many of these dams are facing various structural deficiencies as well as shortcomings in the operation and monitoring facilities. There are also inefficiencies in the monitoring of real-time information regarding dam health and ongoing rehabilitation measures. These conditions affect the safety of the structures and pose risks to life and properties of people downstream of dam.

In April 2012, the six-year **Dam Rehabilitation and Improvement Project (DRIP)** was launched at an estimated cost of 2100 Crore INR for assisting dam-owning agencies in rehabilitating selected dams across selected states.

In 2017, the project has been extended by two years, until June 2020, to finish all of the programmed rehabilitation works on 223 dams in 7 states, with a revised cost of 3466 Crore INR.

In this context, the **Dam Health and Rehabilitation Monitoring Application (DHARMA)** has been designed and developed *to enhance the capacity of individuals and organisations throughout India to manage their dam assets* scientifically and professionally so as to sustain advantages of dams (irrigation and water supply, flood control, hydropower etc.) and prevent disasters.

Figure 1: DHARMA capturing information

Why is it needed ?

Managing the Dam Safety of over five thousand dams entails a number of obstacles to overcome. The prime challenge is to deliver the precious dam health information collected during the site inspection to the State and Central **Dam Safety Organisations (DSOs)** in a timely and secure manner. Improving this transmission of information thanks to data analysis will generate a more precise monitoring of the dams' health in DSOs as well as a more informed prioritization of rehabilitation works. To accomplish this goal, the four main challenges listed below must be overcome; it is DHARMA's goal to address these challenges.

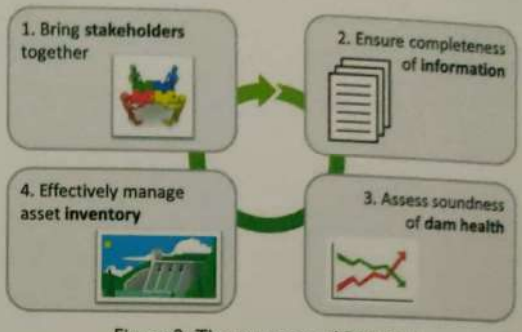

Figure 2: The purposes of DHARMA

1. Bring Stakeholders Together

DHARMA will ensure that details of all stakeholders are recorded and maintained. Such details may pertain to individuals as well as organisational entities associated with dam planning and design, construction, operation and maintenance, and rehabilitation.

2. Ensure Completeness of Information

DHARMA will enable gathering and updating of dam asset information in a centralised and structured manner so as to overcome limitations of multiplicity of agencies, wide geographical spread, voluminous data, varied terminologies and units, unknown and mismatched time reference and inconsistent formats.

3. Assess Soundness of Dam Health

DHARMA will ensure prompt capturing of inspection and investigation data directly by the 'Dam Health Engineers' and provide tools for correct analysis and interpretation of this time dependent data.

4. Effectively manage Asset Inventory

DHARMA will provide a complete data collection and management platform for assimilation of varied information for every dam component across all dam projects, also thereby benefiting from the insights and learning curves of a wider stakeholder spectrum.

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The Users of DHARMA

DHARMA User Types

DHARMA has been designed for individuals and organisations at **Dam, State and Central level**. Owing to the large number of dams, several thousand individuals are expected to use the software; they will be assigned to seven main user roles across three tiers, as presented below:

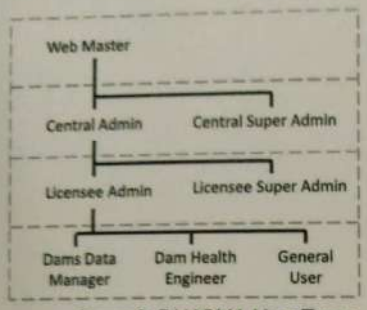

Figure 3: DHARMA User Types

The highest tier **'Licensors'** includes the 'Central Admin' and 'Central Super Admin' roles — these are based in the Central Dam Safety Organisation (in Central Water Commission) and are responsible for administrative control and distribution of the DHARMA software. One of the responsibilities of the 'Licensors' is to grant licenses to the second **'Licensees'** tier which includes the 'Licensee Admin' and 'Licensee Super Admin' roles. These are typically members of Central or State dam owning organisations (eg. State Water Resources Departments). Licensees, in turn, can add three types of **'Application Users'** namely 'Dams Data Manager', 'Dam Health Engineer' and 'General User' who are responsible for managing and updating the data in DHARMA.

A clear distinction is made between the 'Dams Data Manager' (DDM) and 'Dam Health Engineer' (DHE). The **Dams Data Manager**'s role is to manage the static information of dams, i.e. information that is entered once into the software and rarely changes (such as Spillway Capacity, Location of Dam, Access…). He/she is authorized to manage the data of the first three modules, presented in the next page. The **Dam Health Engineer**'s role is to manage dynamic data of a Dam, i.e. data that requires regular updates such as inspection report, investigations, instrumentation data…

DHEs are able to enter their inspection report directly on the software. A mobile application will also be developed for them to enter and upload their inspection report directly from dam site. An option to upload geo-referenced data and photos of each deficiency will be included so as to report deficiencies as precisely as possible.

	Dams Data Manager (DDM)	Dam Health Engineer (DHE)
Type of Data handled	**Static Data**	**Dynamic Data**
Modules	**Modules 1 to 3**: Project Features, Project Portfolio, Engineering Features	**Modules 4 to 7**: Asset Health, Asset Rehabilitation, Stakeholders, Document Library
Tasks assigned	• Entering **high level information** of the dam (Height, location, access, ...) • Creating the **Portfolio** of the Dam by assembling the different DHARMA **components** to match the physical layout of the dam • **Geo-referencing** of each component on Google Maps and adding **photos** • Entering the **technical details** of each **component** (Dam Block, Spillway, Gallery...)	• Entering the regular **pre** and **post monsoon inspection reports** • Entering and updating the **O&M, Investigations, Instrumentation, and EAP** data of the dam • Entering the details of **rehabilitation works** implemented at the dam • Entering the **contact** details of the dam's staff and suppliers in the **Stakeholders** Module • Uploading all important **dam documents** in pdf format into the Document Library Module

Figure 4: Distinction between DDM and DHE

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DHARMA Modules

DHARMA consists of the 7 modules and 2 additional data analysis tools presented below:

Static Modules

1. Project Features

This module gives the static, high-level details of a dam project, such as the Dam's Height, Location, Access details… The General, Location and Financial information will be stored for all projects as well as the details of specific benefits provided by each dam: Irrigation, Hydropower, Navigation, Water Supply, Industrial, Tourism, Flood Control, Fishing, and Other Benefits.

2. Project Portfolio

It allows the Dams Data Manager to describe the make-up of his/her dam project using seventeen building blocks, the DHARMA components (Figure 6). Each component is added and organized in layers, similar to the MS Windows Explorer menu. For each component, the user can locate its exact position on Google Maps, upload pictures and schematics.

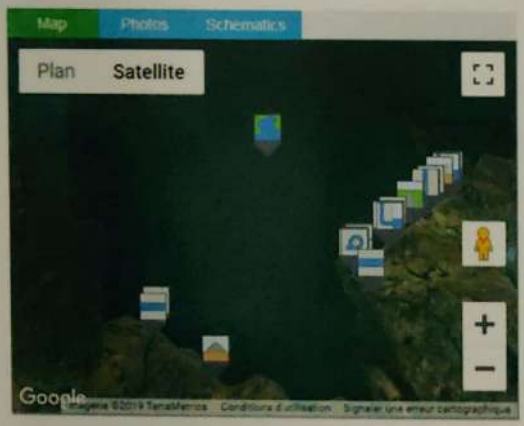

Figure 5: DHARMA Project Portfolio Map

3. Engineering Features

This module contains the technical details associated with each of the components entered in the Project Portfolio module. For example, whereas the name, location, photos and schematics of a storage reservoir would be entered in the Project Portfolio module, it is in Engineering Features that the volumes, elevations and dimensions are provided.

Dynamic Modules

4. Asset Health

This module supports the creation of regular pre and post-monsoon inspections and specific inspections. In this module, the Dam Health Engineers can also upload Instrumentation, Operation & Maintenance (O&M) and Emergency Action Plan (EAP) data, which is attached to the components from the Project Portfolio.

5. Asset Rehabilitation

Also to be administered by designated Dam Health Engineers, it captures the details of any rehabilitation works (minor or major) at the dam project. The need for future rehabilitation works should be identified in the inspection forms of the asset health module however, previous or historic rehabilitation works (pre-DHARMA) can also be entered into the module independently.

6. Stakeholders

The purpose of this module is to capture details of all individuals and organizations involved with each dam project including dam owners, operators, designers, consultants, contractors, and suppliers. Simple forms are provided explaining the nature and duration of involvement of each party and their contact details.

7. Document Library

The last module enables users to upload important designs and documents into a user-friendly database from where they can be easily retrieved using filters and other search criteria. An additional functionality will allow users to tag the documents such that they can be retrieved from other relevant sections of the software using hyperlinks.

Data Analysis Tools

The **Dashboard** enables Dam Safety Organisations to monitor the data-entry for each dam and to pinpoint dams with critical deficiencies.

Figure 6: DHARMA Static Dashboard

The **Report Generator** creates lists of dams responding to selected criteria. (State, Purpose, Completion Year…)

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Implementation of DHARMA

The success of DHARMA particularly depends on its uptake by Dam Data Managers and Dam Health Engineers around the country (cf. page 2, the users of DHARMA) as they will be in charge of entering all the data. The implementation of the DHARMA application is therefore as important as its design and development.

The first two modules were launched in May 2016 then, the team of designers, which gathers both software developing and civil engineering skills, started to perform training sessions around India in order to make the users familiar with the application.

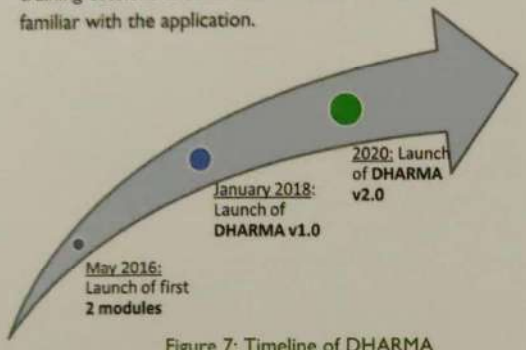

Figure 7: Timeline of DHARMA

DHARMA v1.0 was launched nationally in January 2018, during the previous International Dam Safety Conference in Trivandrum and following the successful migration of the National Register of Large Dams (NRLD) in 2017. Since then 24 trainings were held for 865 participants including 4 trainings in non-DRIP Sates (Rajasthan, Maharashtra & Gujarat). Thanks to these trainings sessions, today 600 people use DHARMA actively and 1546 dams are assigned (out of 5236 large dams in India).

The trainings take place in the State Capitals, they are arranged by the Implementing Agencies which are part of the Dam Rehabilitation and Improvement Project (DRIP). Participants of the trainings (ranging from 30 to 90 for each session) receive hands-on sessions for each module and tool, interactive quizzes and presentations on the purpose and benefits of DHARMA.

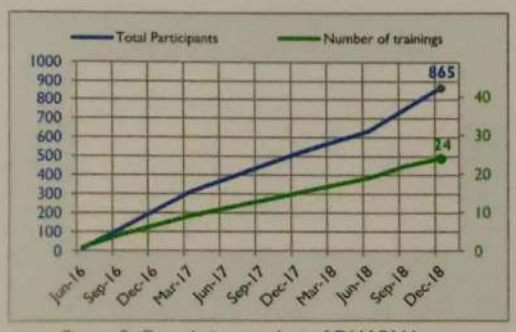

Figure 8: Cumulative number of DHARMA users

The **version 2.0** of DHARMA is to be implemented by December 2020. This version is currently under design and is likely to consist of 4 additional "sub-modules" and 3 additional tools.

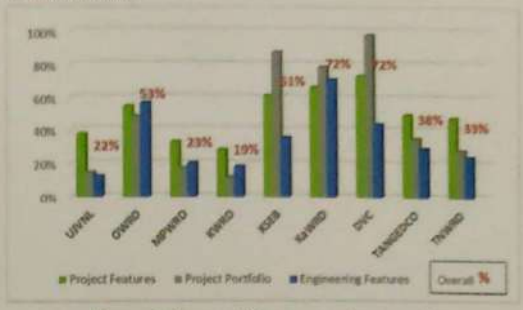

Figure 9: Status of data entry Agency-wise

Here is a list of all Implementing Agencies already using DHARMA:

	Implementing Agencies	Dams assigned to agency	Dams with entered data	Total Users
Agencies in DRIP	Odisha Water Resources Department	204	182	204
	Karnataka Water Resources Department	231	184	122
	Tamil Nadu Water Resources Department	84	84	91
	Madhya Pradesh Water Resources Dpt	887	42	85
	Kerala Water Resources Department	20	20	63
	Uttarakhand Jal Vidyut Nigam Limited	6	4	33
	Kerala State Electricity Board	36	36	25
	Tamil Nadu Elec Gen & Distrib Corp	38	38	15
	Damodar Valley Corporation	4	4	8
Agencies not in DRIP	Rajasthan Water Resources Department	211	131	90
	Maharashtra Water Resources Department	2354	60	49
	Gujarat Engineering Research Institute	631	21	31
	Punjab Water Resources Department	15	14	16
	Bhakra Beas Management Board	4	4	7
	Uttar Pradesh Irrigation and WRD	133	1	3
	National Hydroelectric Power Corporation	22	22	3
	Bihar Water Resources Department	26	1	3
	Meghalaya Power Gen Corp Limited	7	-	2
	Narmada Hydroelec Dvpt Corporation Ltd	-	-	2
	Telangana Irrigation and CAD Department	174	-	2
	Himachal Pradesh State Electricity Board	2	-	2
	Karnataka Engineering Research Station	-	-	2
	Chhattisgarh Water Resources Department	258	-	1
	Goa Water Resources Department	6	-	1
	Jammu and Kashmir Water Resources Dpt	1	-	1
TOTAL		5354	848	861

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Who can I contact to know more?

This is the fourth information bulletin on DHARMA. Development of updated versions of DHARMA and implementation of the software will continue to be taken up in a phased manner under the guidance of the **DHARMA Development Group (D3G)** and **DHARMA Implementation Group (DIG)**. All DRIP dams are expected to be incorporated into DHARMA before the completion of DRIP.

In the meantime, further information on the Dam Rehabilitation and Improvement Project (DRIP) can be found at www.damsafety.in. For further information on DHARMA, please also visit our dedicated website '**damsafety.in/dharma**.' where you can download the latest **User Manual**.

For any other queries, the DHARMA team can be contacted through the details provided below.

For further information please contact:
Project Director, DRIP and DSR Director, Central Water Commission
3rd Floor, New Library Building, R.K. Puram, New Delhi—110066
Telefax: +91-11-26192633
Email: dir-drip-cwc@nic.in Website: www.damsafety.in

DRIP
Dam Rehabilitation & Improvement Project

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Part-8

Health Status of Gated Dam (As per Mechanical Organisation)

Part-8 Status report of Gates of Various gated dams in North Maharashtra region (including Private Dams)

8.1 General

As 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	Dams with rectifiable Deficiencies needs immediate attention	Serious Defects (2A)
(2 A)& (2B)		Require immediate attention (2B)
Def. Category 3	General Defects	General Defects

In the year of 2021 pre and post monsoon inspection of total gated dams have been carried out by Mechanical Organisation. 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 organisation. This report is published and submitted to WRD and circulated to all Concern Chief Engineers.

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

8.2 Overall Health Statues of Gated Dams

35 Class-I gated dams in the North Maharashtra region were inspected by Mechanical Organisation. 01 Category -1 deficiency is observed on Sarangkheda Barrage .Category -2 & 3 deficiencies are observed on all the 35 dams. Total 655 Category -2 deficiencies and 1726 Category -3 deficiencies are observed on the dams in the region.

Table 8.1
Status of Deficiencies

Sr. No.	Name of Class-1 Gated Dam	Category wise Identified Deficiencies			Remarks
		Cat-I	Cat-II (2A)&(2B)	Cat-III	
1	*2*	*3*	*4*	*5*	*6*
A)	**Chief Engineer (NMR)**				
(1) Superintending Engineer & Adm., CADA, Nashik					
(a) Executive Engineer,NID,Nashik					
1	Gangapur	0	11	14	
2	Darana	0	11	13	
3	Kadwa	0	00	13	
4	Mukane	0	07	24	
5	Kashyapi	0	05	20	
6	Gautami Godawari	0	09	17	
7	Nandur Madhameshwar	0	17	43	
b) **Executive Engineer,PID,Nashik**					
8	Karanjvan	0	06	33	
9	Punegaon	0	09	21	
10	Palkhed	0	03	16	
c) **Executive Engineer,AID,Ahemadnagar**					
11	Bhandardara	0	07	17	
d) **Executive Engineer,Mula ID,Ahemadnagar**					
12	Mula	--	--	--	Not Inspected
e)Executive Engineer, MID,Malegaon					
13	Chanakapur	0	04	23	
2) **Superintending Engineer & Adm., Ahemadnagar**					
a) **Executive Engineer**Upper Pravara Dam div, Sangamner					
14	Nilvande	--	--	--	Not Inspected
b)Executive Engineer, Nandurmadhmeshwar Project Div, Nashik					
15	Waki	0	00	08	
B)	**CE, TIDC, Jalgaon**				
1) Superintending Engineer&Adm,CADA,Jalgaon					
1) Executive Engineer,GID,Jalgaon					
16	Bori	0	25	74	
2) **Executive Engineer,JID,Jalgaon**					
17	Hatnur	0	42	148	
18	Bahula	0	16	60	

19	Mor	0	29	40	
Sr. No.	**Name of Class-1 Gated Dam**	**Category wise Identified Deficiencies**			**Remarks**
		Cat-I	**Cat-II (2A)&(2B)**	**Cat-III**	
1	*2*	*3*	*4*	*5*	*6*
3)Executive Engineer,GID,Jalgaon					
20	Girna	0	12	69	
4)Executive Engineer,DID,Dhule					
21	Amrawati	0	43	----	
22	Aner	0	29	----	
23	Sonwad	0	42	82	
24	Prakasha Barage	0	16	40	
25	Sarangkheda Barage	1	34	43	
2) **Superintending Engineer,JIPC,Jalgaon**					
1) **Executive Engineer,JMPD,Jalgaon**					
26	Anjani	0	17	86	
27	Gul	0	35	86	
2)Executive Engineer Waghur Dam Div Jalgaon					
28	Waghur	0	38	154	
3)Superintending Engineer,DIPC,Dhule					
1) **Executive Engineer, NMPD No 2, Nandurbar**					
29	Susri	0	25	45	
30	Shivan	0	27	63	
2) **Executive Engineer,DMPD,Dhule**					
31	Nagan	0	18	92	
32	Wadishewadi	0	26	101	
33	Akkalpada (Lower Panzra)	0	19	125	
34	Sulwade Barage	0	26	35	
3) **Executive Engineer,GRVP Div,Nashik**					
35	Punand	0	43	113	
Private Dam					
1)Comissioner, Nashik Municipal Corporation Nashik					
36	Chehadi Barrage Private Dam (Class-II)	0	04	---	
	Total -	**01**	**655**	**1726**	


PUNAND DAM
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