मृद व जलसंधारण विभागाच्या अधिपत्याखालील अधिकारी/कर्मचारी यांना पायाभूत/पदोन्नतीनंतरचे प्रशिक्षण धोरण निश्चित करणेबाबत......

महाराष्ट्र शासन मृद व जलसंधारण विभाग

शासन निर्णय क्रमांक : आस्थाप-२०२४/प्र.क्र.३७९/जल-२

मादाम कामा मार्ग, हुतात्मा राजगुरु चौक, मंत्रालय, मुंबई-४०० ०३२ दिनांक : २७ मार्च, २०२५

वाचा :- मृद व जलसंधारण विभागाचे पत्र क. आस्थाप-२०२४/प्र.क्र.३७९/जल-२, दि.२३.०१.२०२५

प्रस्तावना:-

मृद व जलसंधारण विभागाच्या अधिपत्याखालील अधिकारी/ कर्मचारी हे प्रशासकीय सेवा देण्यासाठी सक्षम मनुष्यबळ म्हणून उपलब्ध होण्यासाठी त्यांना Domain Knowledge and Administrative procedure वर भर देऊन प्रशिक्षण देण्यासाठी प्रशिक्षण मोड्युलमध्ये आवश्यक सुधारणा करण्यासाठी संदर्भाधीन पत्रान्वये आयुक्त, मृद व जलसंधारण यांच्या अध्यक्षतेखाली अभ्यासगट स्थापन करण्यात आला.

मृद व जलसंधारण विभागाच्या अधिपत्याखालील कार्यालयात महाराष्ट्र लोकसेवा आयोगाकडून सरळसेवेने नियुक्त झालेले अधिकारी/कर्मचारी तसेच पदोन्नत अधिकारी /कर्मचारी हे प्रशासकीय सेवा देण्यासाठी सक्षम मनुष्यबळ म्हणून उपलब्ध होण्यासाठी त्यांना पायाभूत तसेच पदोन्नतीनंतरच्या प्रशिक्षणाकरीता Domain Knowledge and Administrative procedure वर भर देऊन प्रशिक्षण देण्यासाठी सुधारित प्रशिक्षण मोड्युल तयार करण्याचे शासनाच्या विचाराधीन होते.

शासन निर्णय:-

मृद व जलसंधारण विभागाकडून राबविण्यात येणाऱ्या विविध योजना, योजनांची अंमलबजावणी करताना येणाऱ्या अडचणी/आव्हाने, अद्ययावत तंत्रज्ञानाचा वापर, कार्यपध्दतीमध्ये करावयाच्या सुधारणा इ. बाबी विचारात घेऊन तांत्रिक तसेच प्रशासकीय स्वरुपाचे प्रशिक्षण देणे आवश्यक आहे. प्रशासकीय स्वरुपाचे प्रशिक्षण हे यशदा, पुणे व अधिनस्त प्रबोधिनी मार्फत देण्यात येते. मृद व जलसंधारण विभागातील अधिकारी/कर्मचारी यांच्या कर्तव्य व जबाबदाऱ्या पाहता, सर्व संवर्गाकरीता तांत्रिक स्वरुपाचे प्रशिक्षण देण्यासाठी स्वतंत्र प्रशिक्षण मोड्युल सोबतच्या प्रपत्राप्रमाणे तयार करण्यात आले आहे. सदर प्रशिक्षणाचा कालावधी पुढीलप्रमाणे आहे.

अ.	पदनाम	सरळसेवा/	प्रशिक्षण कालावधी
क्र.		पदोन्नत	
9	जलसंधारण अधिकारी (स्थापत्य) गट-ब	सरळसेवा	५ दिवस
	(राजपत्रित/अराजपत्रित)	(नवनियुक्त)	(प्रारंभिक प्रशिक्षण)
			६ आठवडे
			(Induction)
		पदोन्नतीनंतरचे	२ आठवडे
२	उपविभागीय जलसंधारण अधिकारी (स्थापत्य),	सरळसेवा	६ आठवडे
	गट-अ	(नवनियुक्त)	
		पदोन्नतीनंतरचे	२ आठवडे
3	जिल्हा जलसंधारण अधिकारी, गट-अ	पदोन्नतीनंतरचे	२ आठवडे
8	प्रादेशिक जलसंधारण अधिकारी, गट-अ	पदोन्नतीनंतरचे	२ आठवडे
4	स्थापत्य अभियांत्रिकी सहायक/मंडळ जलसंधारण	सरळसेवा	२ आठवडे
	अधिकारी	(नवनियुक्त)	

सदर प्रशिक्षण मोड्युलनुसार सर्व सरळसेवा/पदोन्नत/दर्जोन्नत अधिकारी/कर्मचारी यांना प्रशिक्षण देण्याची जबाबदारी महासंचालक, जल व भूमी व्यवस्थापन संस्था (वाल्मी), छ.संभाजीनगर यांची राहील.

२. सदर शासन निर्णय महाराष्ट्र शासनाच्या <u>www.maharashtra.gov.in</u> या संकेतस्थळावर उपलब्ध करण्यात आला असून त्याचा संकेताक २०२५०३२७१८०४१९२१६ असा आहे. हा आदेश डिजीटल स्वाक्षरीने साक्षांकित करुन काढण्यात येत आहे.

महाराष्ट्राचे राज्यपाल यांच्या आदेशानुसार व नावाने,

(श. ह. खारोडे) कक्ष अधिकारी, महाराष्ट्र शासन

प्रत-

- १. मा.मंत्री, मृद व जलसंधारण यांचे खाजगी सचिव
- २. मा.राज्यमंत्री, मृद व जलसंधारण यांचे खाजगी सचिव
- ३. सचिव (मृद व जलसंधारण) यांचे वरिष्ठ स्वीय सहायक,मंत्रालय, मुंबई
- ४. आयुक्त, मृद व जलसंधारण, वाल्मी, छ.संभाजीगनर
- ५. सर्व मुख्य कार्यकारी अधिकारी, जिल्हा परिषद
- ६. अपर आयुक्त जलसंधारण, मृद व जलसंधारण प्रादेशिक क्षेत्र, नागपूर/पुणे
- ७. सर्व प्रादेशिक जलसंधारण अधिकारी, मृद व जलसंधारण विभाग
- ८. सर्व प्रादेशिक दक्षता व गुणनियंत्रण अधिकारी, मृद व जलसंधारण विभाग
- ९. सर्व जिल्हा जलसंधारण अधिकारी, मृद व जलसंधारण विभाग
- १०. सर्व जिल्हा जलसंधारण अधिकारी, जिल्हा परिषद (ल.पा.)
- ११.निवडनस्ती (जल-२)

Syllabus of Induction Course for Newly Recruited Mandal/CEA/Circle Officer (Duration: 2 Weeks)

Sr. No.	Topic
1	Roles and Responsibilities of Mandal/CEA/ Circle Officer in SWCD
2	Surveying and leveling: (Various instruments, Leveling, contour, area measurement and practical) with Advanced Instruments
3	Preparation of estimate, mode of measurement and costing
4	Concrete Mix Design/High Performance Concrete
5	Low-cost Concrete (Use of fly ash in Concrete)
6	Concept of Watershed Development and Management, various schemes of State/Central Govt e.g. Jalyukt Shiwar, NAREGA, PMKSY etc.
7	Rainwater harvesting techniques for rural area including CAT Planning and for urban area (Roof Top)
8	Introduction to various SWC measures in upper, middle and lower reaches
	(site selection criteria, design aspects etc.)
9	Agronomic Measures for Soil & Water Conservation
10	Cement Nalla Bandhara (CNB): Design and execution
11	Design of earthen embankment and various control levels
12	Maintenance and repairs of various SWC structures
13	Types of conventional & nonconventional flow measuring devices & practical
14	Personality Development (communication skills, stress management etc.)
15	Flagship Programme of department viz; Jalyukta Shiwar Abhiyan, Galmukta Dharan & Galyukta Shiwar, Atal Bhujal Yojna, PMKSY WDC 2.0
16	Various Important Govt. Resolutions of SWCD
17	Quality Control of Materials & structures
18	Right to Information
19	Time Management & Leadership Development
20	Field Visit to Watershed Project
21	Water Body Census
22	Field Visit to Water Users Association
23	Water Budgeting of Village
24	Maharashtra Civil Services Rules

नवनियुक्त जलसंधारण अधिकाऱ्यांसाठी प्रारंभिक प्रशिक्षण वर्ग कालावधी: १ आठवडा (५ दिवस)

दिनांक	सत्र	विषय
१ ला दिवस	१	प्रशिक्षणार्थीची नोंदणी
	7	उद्घाटन समारंभ व मा. आयुक्त यांचे मार्गदर्शन
	3	मृद् व जलसंधारण विभागाची तोंडओळख, संघटन तक्ता, धोरण, अधिकाऱ्यांची
		कर्तव्ये व जबाबदाऱ्या
	8	मृद व जलसंधारण विभागामार्फत राबविल्या जाणाऱ्या विविध योजनांची माहिती व
		ठळक वैशिष्टे
	ų	जलयुक्त शिवार अभियान टप्पा क्र. २ ठळक वैशिष्टे, प्रकल्पांची प्रशासकीय मान्यता/
		तांत्रिक मान्यता व सु.प्र.मा.
२ रा दिवस	१	कार्यालयीन कामकाज व पत्रव्यवहार
	?	महाराष्ट्र नागरी सेवा नियम
		(सेवेच्या सर्वसाधारण शर्ती, वर्तणूक इ.)
	3	महाराष्ट्र नागरी सेवा नियम
		(शिस्त व अपील, रजा इत्यादि)
	8	लेखा व कोषागार नियम, नवीन खरेदीबाबत नियम
	ų	माहिती अधिकार व लोकसेवा हमी कायदा
३ रा दिवस	१	प्रधानमंत्री कृषी सिंचन योजना — पाणलोट विकास घटक २.० योजनेची ठळक वैशिष्टे
	7	पाणलोट क्षेत्र संकल्पना व पाणलोट जल विज्ञान
	3	मृद व जलसंधारणाचे विविध उपचार व पद्धती
	Χ	पाणलोट क्षेत्र जल परिपूर्णतेसाठी पाण्याचा ताळेबंद
	ų	पाणी वापर कार्यक्षमता वाढविण्यासाठी सूक्ष्म सिंचन पद्धतींचा वापर
४ था दिवस	१	महाराष्ट्र सार्वजनिक बांधकाम नियमावली — विषय ओळख, MI Manual
	7	कामांचे मुल्यांकन, मोजमाप पुस्तिका व देयके जलसंधारण अधिकाऱ्यांची कर्तव्ये व
		जबाबदाऱ्या
	3	अंदाजपत्रक तयार करणे, प्रशासकीय मान्यता/ तांत्रिक मान्यता व निविदा प्रक्रिया
	8	प्रक्षेत्र भेट : मृद व जलसंधारण उपचार व बांधकामे, वाल्मी परिसर
	ų	प्रक्षेत्र भेट : मृद व जलसंधारण उपचार व बांधकामे, वाल्मी परिसर
५ वा दिवस	१	महाराष्ट्र जलसंधारण महामंडळ संबंधातील कामकाज
	7	पाणलोट क्षेत्र विकास प्रकल्पांचे नियोजन, देखरेख व प्रकल्प पश्चात मूल्यांकनासाठी
		रिमोट सेन्सिंग व जिआयएस तंत्रज्ञानाचा वापर (Mapping, Geo-Tagging etc.)
	3	जल संधारण बांधकामांची गुणवत्ता नियंत्रण व देखभाल दुरुस्ती
	8	भूसंपादन, पुनर्वसन व पर्यावरण मान्यता, वन जमीन बाबत विषय ओळख
	ц	माहिती, शिक्षण संवाद व प्रभावी संवाद कौशल्य
	ξ	प्रतिक्रिया, समारोप व प्रमाणपत्र वितरण

Syllabus of Induction Course for newly recruited AE II/ JE (WCO) of SWCD (Duration: 6 Weeks)

Sr. No.	Topic
1	Water Resources status of Maharashtra. Dept structure (WRD/SWCD) and duties and
	responsibilities of various officers
2	Watershed Hydrology: Infiltration Concept and application
3	Surveying and leveling: (Various instruments, Leveling, contour, area measurement and practical)
4	Hydrological aspects for design of various SWC Structures (Watershed hydrology:
	rainfall, infiltration, runoff concept, Various formulae for runoff, SCS-CN Method etc.
5	Preparation of estimate, mode of measurement and costing
6	M.B. Recording and allied things
7	Lift Irrigation Schemes, PDN: concept and design
8	Micro irrigation (Drip and Sprinkler Irrigation method)
9	IWRM Concept and water use efficiency
10	Overview of Innovations in Concrete (Reactive Power Concrete, Geo polymer
	Concrete, Fibre Reinforced Concrete, ferrocement concrete etc.
11	Concrete Mix Design/High Performance Concrete
12	Low-cost Concrete (Use of fly ash in Concrete)
13	Water Budgeting and proposals for SWC structures
14	Concept of Watershed Development and Management, various schemes of
	State/Central Govt e.g. Jalyukt Shiwar, NAREGA, PMKSY etc.
15	Rainwater harvesting techniques for rural area including CAT Planning and for urban area
	(Roof Top)
16	Hydro geological conditions of Maharashtra (GW Recharge), Well Hydraulics and yield of well
17	Various types of Soil Conservation Treatments
18	Maharashtra Waters Conservation Corporation related works
19	Introduction to various SWC measures in upper, middle and lower reaches
	(site selection criteria, design aspects etc.)
20	Cement Nalla Bandhara (CNB): Design and execution
21	Design of earthen embankment and various control levels
22	Handing over & Maintenance of SWC structures
23	Remote Sensing, GIS, concept and application (Geo tagging, Practical on web-based RS
	and GIS etc)
24	Design of irrigation channel and various structures, Concept of Walk through survey
25	Maintenance and repairs of various SWC structures
26	Types of conventional & nonconventional flow measuring devices &practical

27	Water Budgeting for Agril. Crops
28	Agro-climatic zones of Maharashtra, Soil survey techniques and Land Capability
	Classification
29	Introduction to various SWC measures in upper, middle and lower reaches
30	Cropping pattern in command areas in relation to climate, soil and availability of irrigation water
31	Soil-Water-Plant Relationship
32	Irrigation Requirement of various Crops
33	Economics of SWC structures: terminologies IRR, BC Ratio
34	PIM: Concept and application
35	IEC and BCC- Concept, models & applications in management of WUA
36	Irrigation act, MWRRA, MMISF Act etc.
37	Personality Development (communication skills, stress management etc.)
38	Flagship Programme of department viz; Jalyukta Shiwar Abhiyan, Galmukta Dharan & Galyukta Shiwar, Atal Bhujal Yojna, PMKSY WDC 2.0
39	Various Important Govt. Resolutions of SWCD
40	Roles and Responsibilities of Water Conservation Officers
41	Maharashtra Civil Services Rules
42	Account Procedure
43	MI & MPW Manual
44	Land acquisition with court matters
45	Tender, Schedule B, BOQ, preparation of Tender documents
46	Quality Control of Materials & structures
47	Right to Information
48	Time Management & Leadership Development
49	Seminar
50	Field Visit to Watershed Project
51	Field Visit to Agriculture University
52	Field Visit to Irrigation Project
53	Field Visit to Water Users Association
54	Field Project Exercise (Case Study)

Syllabus of Course for Promoted WCO (Non-Gazeted) (Duration: 2 Weeks)

Sr. No.	Topic
1	Roles and Responsibilities of Water Conservation Officers
2	Surveying and leveling: (Various instruments, Leveling, contour, area measurement and practical)
3	Preparation of estimate, mode of measurement and costing
4	Concrete Mix Design/High Performance Concrete
5	Low-cost Concrete (Use of fly ash in Concrete)
6	Concept of Watershed Development and Management, various schemes of State/Central Govt e.g. Jalyukt Shiwar, NAREGA, PMKSY etc.
7	Rainwater harvesting techniques for rural area including CAT Planning and for urban area (Roof Top)
8	Introduction to various SWC measures in upper, middle and lower reaches (site selection criteria, design aspects etc.)
9	Cement Nalla Bandhara (CNB): Design and execution
10	Design of earthen embankment and various control levels
11	Handing over & Maintenance of SWC structures
12	Maintenance and repairs of various SWC structures
13	Types of conventional & nonconventional flow measuring devices &practical
14	Personality Development (communication skills, stress management etc.)
15	Flagship Programme of department viz; Jalyukta Shiwar Abhiyan, Galmukta Dharan & Galyukta Shiwar, Atal Bhujal Yojna, PMKSY WDC 2.0
16	Various Important Govt. Resolutions of SWCD
17	MI & MPW Manual
18	Land acquisition with court matters
19	Quality Control of Materials & structures
20	Right to Information
21	Time Management & Leadership Development
22	Field Visit to Watershed Project
23	Water Body Census
24	Field Visit to Water Users Association

Syllabus of Course for Promoted WCO (Non-Gazeted) to WCO (Gazeted) (Duration: 2 Weeks)

Sr. No.	Торіс
1	Water Resources status of Maharashtra. Dept structure (WRD/SWCD) and duties and responsibilities of various officers
2	Surveying and leveling: (Various instruments, Leveling, contour, area measurement and practical)
3	Preparation of estimate, mode of measurement and costing
4	M.B. Recording and allied things
5	Lift Irrigation Schemes, PDN: concept and design
6	Micro irrigation (Drip and Sprinkler Irrigation method)
7	Concrete Mix Design/High Performance Concrete
8	Concept of Watershed Development and Management, various schemes of
	State/Central Govt e.g. Jalyukt Shiwar, NAREGA, PMKSY etc.
9	Introduction to various SWC measures in upper, middle and lower reaches
	(site selection criteria, design aspects etc.)
10	Cement Nalla Bandhara (CNB): Design and execution
11	Design of earthen embankment and various control levels
12	Handing over & Maintenance of SWC structures
13	Maintenance and repairs of various SWC structures
14	Types of conventional & nonconventional flow measuring devices &practical
15	Various Important Govt. Resolutions of SWCD
16	Maharashtra Civil Services Rules
17	Account Procedure
18	MI & MPW Manual
19	Tender, Schedule B, BOQ, preparation of Tender documents
20	Quality Control of Materials & structures
21	Right to Information
22	Time Management & Leadership Development
23	Field Visit to Water Users Association
24	Field Visit to Watershed Project

Syllabus of Induction Course for newly recruited AE-I (SDWCO) of SWCD (Duration: 6 Weeks)

Sr. No.	Topics		
	The Maharashtra Public Works Manual		
1	Working Organization and function of WCD Department		
2	Function and Responsibilities and Duties of Jalsandaran Adhikari, Sub Divisional Water Conservation Officer, District Soil Conservation Officer, Superintending Engineer, Chief Engineer, Account etc.		
3	Various types of Soil Conservation Treatments		
4	Maharashtra Waters Conservation Corporation related works		
5	Execution of Various departmental works		
6	Survey works for project		
7	Purchase and maintains of store Item and disposal of store material		
8	Power of officers to purchase, manufacture, dispose and write of stores		
9	The Power delegated to department officers		
10	The Maharashtra Public Works Manual other related topic		
11	Tender Clauses and Tenders system		
12	System of Recording measurement, checking and cross of measurement, Delegation of power of record measurements, Measurement books security etc.		
13	भुमिसंपादन पुनर्वसन व पुनर्स्थापना करताना वाजवी भरपाई मिळण्याचा व पारदर्शकतेचा हक्क अधिनियम, २०१३		
14	वित्तीय अधिकार नियम पुस्तिका १९७८ व त्यामधील वेळोवेळी केलेल्या सुधारणा		
15	जिल्हा नियोजन समिती / रो ह यो व इतर योजना		
16	Preparation of monthly & yearly Account and submission of account to AG and Yearly Audit and audit para		
	Minor Irrigation Manual		
17	Physical aspect of Maharashtra state and irrigation		
18	Types of minor irrigation works		
19	Preliminary Investigation Survey and Project Report		
20	Design of Minor Irrigation Tanks		
21	Design of Distribution System		
22	Design of Irrigation system		
23	Execution of Minor Irrigation Project		

24	Ex-Malguzari Tanks
25	महाराष्ट्र सिंचन कायदा १९७६
26	म सिप शे व्य कायदा २००५
27	Dam Safety Act 2021
28	Maharashtra Irrigation act and Irrigation Management related topic
29	प.मं.कृ.सिं.यो. पाणलोट विकास घटक २.०
30	जलयुक्त शिवार अभियान

Syllabus for Refresher Course for Newly Promoted SDWCO (Duration 2 weeks)

Sr. No.	Topic
1	Water Resources Development in Country & Maharashtra: In View of Climate Change
2	Concept of Watershed Development & Management
3	Jalyukt Shiwar Abhiyan Phase 1 & Phase 2 Guidelines
4	Jalyukt Shiwar Abhiyan (Works)
5	PMKSY WDC 2.0 Guidelines
6	Institutional Mechanism in PMKSY WDC 2.0
7	Estimation of Runoff from Watershed Area
8	Various types of Soil Conservation Treatments
9	Maharashtra Waters Conservation Corporation related works
10	Soil & Water Conservation & Rain Water Harvesting Structures
11	Geohydrological Conditions for Ground Water Recharge
12	Water Budgeting of Village
13	Agroclimatic Zones of Maharashtra, Soil Survey and Land Capability Classification
14	Physical and Chemical Properties of Soil
15	Weather Parameter & Applications in Watershed Development & Management
16	Estimation of Eto by various methods
17	Irrigation Scheduling Based on Water Availability I (Critical Growth Stage Approach)
18	Irrigation Scheduling Based on Water Availability II (Soil-Crop-Climate Approach)
19	RTI - Right to Information Act
20	Departmental Court Matters
21	Procedure of E-Tendering, Clause 38, EIRL
22	Procedure of E-Tendering
23	Agronomic Measures for Watershed Development & Management
24	Applications of RS & GIS in Watershed Management
25	Flow Measurement in Irrigation Canals
26	Water User Association: Importance, Concept, Formation and Present Status
27	Piped Distribution Network (PDN) for Irrigation
28	Micro Irrigation System-I & II
29	Supplemental/Protective Irrigation Requirement of Crops
30	Field Visit to Model Watershed
31	Water Laws: (MIA-1976, MMISF-2005, MWRRA-2005)

32	Economic Evaluation of Soil & Water Conservation Structure
33	Case Study of Minor Irrigation Projects for Estimation of IRR, ERR & BC Ratio
34	Roles and Responsibilities of SDWCO
35	MCSR Rules
36	Accounts Procedures
37	IEC and Communication Skills
38	Soil Health Management (# Save Soil)
39	Land Acquisition Act and Procedure

Syllabus of Refresher Course for newly Promoted DWCO (Duration: 2 Weeks)

Sr. No.	Topics
1	The Maharashtra Public Works Manual other related topic
2	Tender Clauses and Tenders system
3	System of Recording measurement, checking and cross of measurement, Delegation of power of record measurements, Measurement books security etc.
4	जलस्त्रोतांची प्रगणना करणे
5	भुमिसंपादन पुनर्वसन व पुनर्स्थापना करताना वाजवी भरपाई मिळण्याचा व पारदर्शकतेचा हक्क अधिनियम, २०१३
6	वित्तीय अधिकार नियम पुस्तिका १९७८ व त्यामधील वेळोवेळी केलेल्या सुधारणा
7	जिल्हा नियोजन समिती / रो ह यो व इतर योजना
8	Preparation of monthly & yearly Account and submission of account to AG and Yearly Audit and audit para
9	Physical aspect of Maharashtra state and irrigation
10	Types of minor irrigation works
11	Preliminary Investigation Survey and Project Report
12	Design of Minor Irrigation Tanks
13	Design of Distribution System
14	Design of Irrigation system
15	Execution of Minor Irrigation Project
16	Ex-Malguzari Tanks
17	महाराष्ट्र सिंचन कायदा १९७६
18	म सिप शे व्य कायदा २००५
19	Dam Safety Act 2021
20	Maharashtra Irrigation act and Irrigation Management related topic
21	प.मं.कृ.सिं.यो. पाणलोट विकास घटक २.०
22	जलयुक्त शिवार अभियान
23	Various types of Soil Conservation Treatments
24	Maharashtra Waters Conservation Corporation related works

Syllabus for Newly Promoted RWCO & CE (Duration: 2 Weeks)

Day	Topics/ Activity	Expert / Faculty
Day 1	Working of Maharashtra Water Conservation Corporation	Managing Director
	Overview of SWCD	Commissioner
	Insights of WALMI	Director General
Day 2 to Day 10	Interstate Exposure Visit to Best Practices in	Coordinator from
	Various States	WALMI
Day 11	Presentation by participants on best practices studied during study tour	All Participants
Day 12	Discussion, Recommendation and Concluding	All concerned