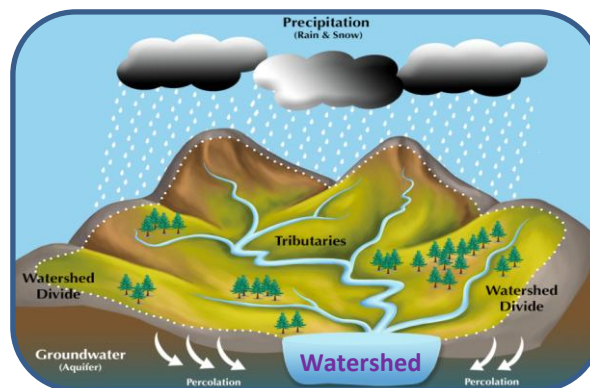


# Government of Telangana – Forest Department



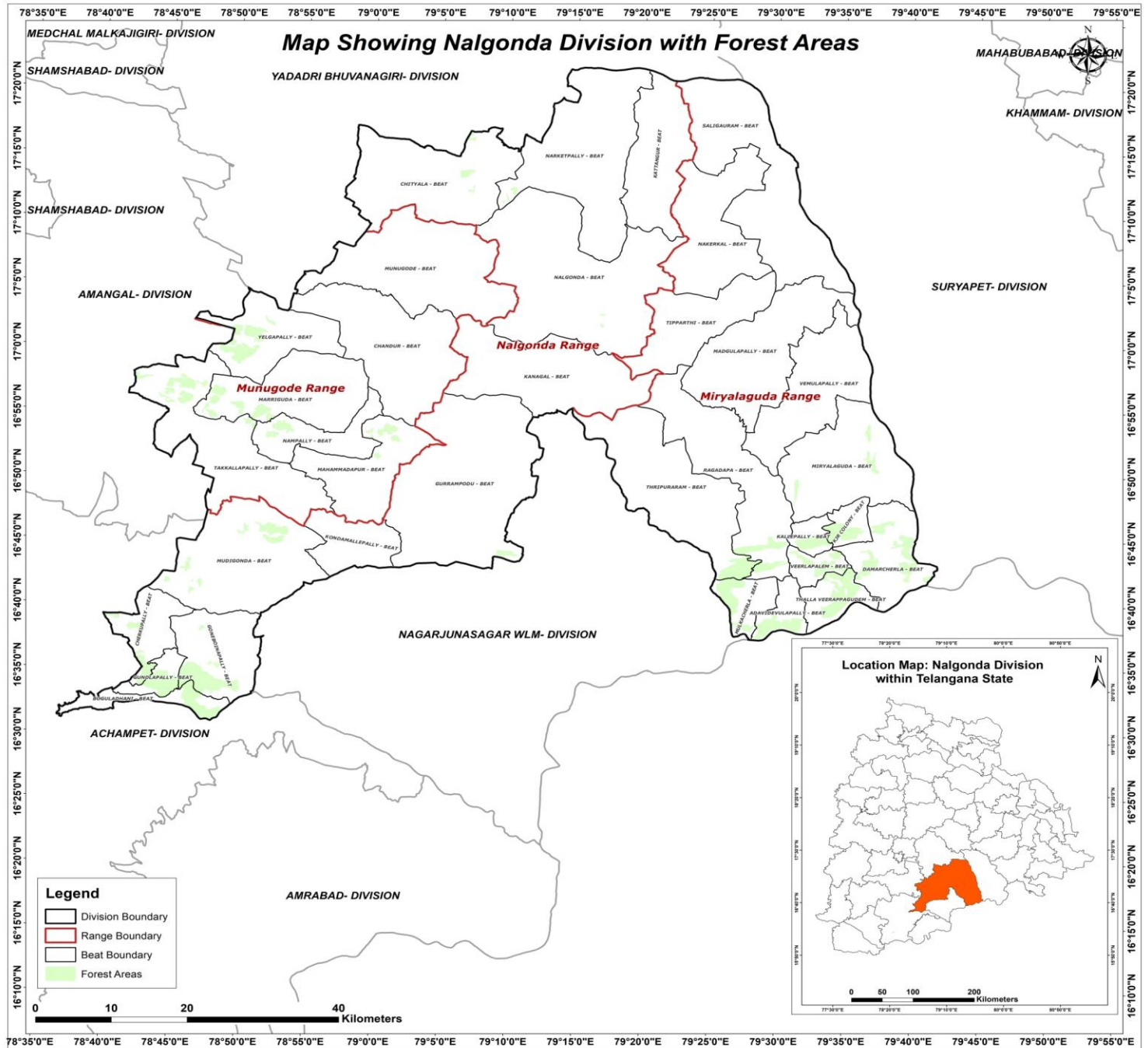
## SITE SUITABILITY ANALYSIS FOR WATER HARVESTING STRUCTURES USING REMOTE SENSING & GIS



# **SITE SUITABILITY ANALYSIS FOR WATER HARVESTING STRUCTURES USING REMOTE SENSING & GIS**

**Circle: Yadadri**  
**District: Nalgonda**  
**Division: Nalgonda**

**Prepared at Geomatics Centre  
O/o Prl.Chief Conservator of Forests  
Aranya Bhavan, Saifabad  
Hyderabad - 500004**



## METHODOLOGY

**Various methods are available to evaluate the suitability of locations for Percolation Tanks and other SMC structures using Arc GIS.**

- A common approach is to use Geographic Information System (GIS) tools to decide the suitability by analysing factors like topography, vegetation density, distance to water sources, and terrain slope.
- Data was gathered from various sources, including the Raster Sentinel data obtained from the Copernicus open access hub.
- Elevation values were applied to the raster data using the SNAP software to create a Digital Elevation Model (DEM).
- Using Arc GIS, streams were mapped based on DEM, and potential percolation tank sites were identified based on stream order.
- Slope data generated from the CARTOSAT 30 m DEM (Source: Bhuvan) were also included in the analysis.
- By overlaying these spatial datasets and applying specific criteria, GIS can help identify optimal locations for building percolation tanks.
- Once the best location is identified, the catchment area is determined.
- The location is then ranked on the basis of catchment area and vegetation cover, with rankings ranging from I to V.



# FLOW CHART FOR METHODOLOGY



## Guidelines for building Percolation Tanks:

- Refer to the Site Suitability Map given by the GIS Cell for suitable locations
- Choose the best location for constructing a percolation tank based on the ranking priority. The priority for treatment of the watershed should be based on stream order, with primary streams taking precedence over secondary streams and secondary streams taking precedence over tertiary streams. This phased approach will ensure effective management of the watershed.
- Field conditions such as local climate, slope, vegetation and soil type must be considered when determining the location. It is important to move either upstream or downstream for a distance of about 50M, depending on the specific conditions of the site.
- It is essential to follow the priority given in the map. If no specific points are indicated, site suitability should be considered a determining factor.
- Encroached areas were not considered when demarcating points for constructing the Percolation tank.
- In the field, where streams are found at the optimal location, a percolation tank can be built if a point is missing on the map.
- The catchment area should also be considered when estimating the construction requirements like length of the bund, height of the bund, wear width etc., after verifying with the actual field conditions.
- Planting native vegetation around the tank can stabilize the soil, prevent erosion, and improve water absorption. Use plants that are well suited to the local environment.



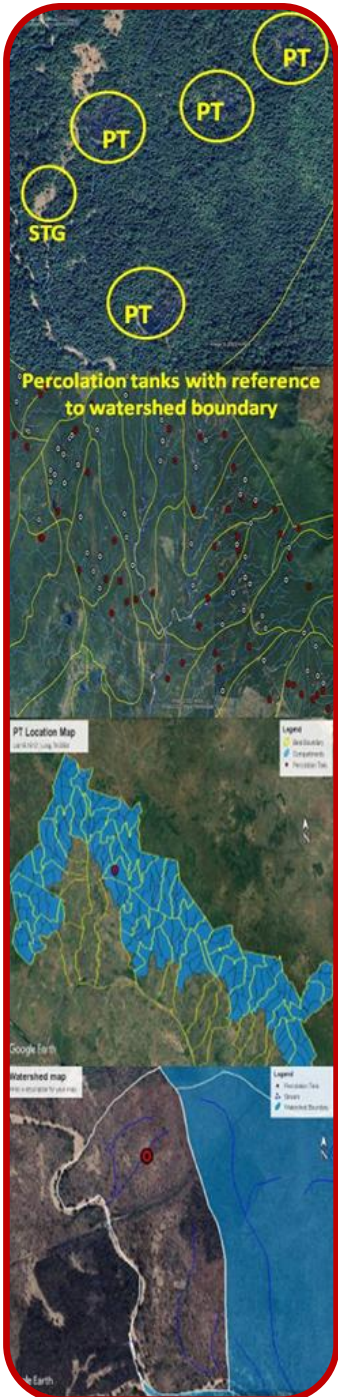
## Suitability criteria for Check-Dams and Percolation Tanks ( SITE SUITABILITY INDEX)

Index	Slope(Degrees)	Density Class
Highly suitable	0-5	Blank & Scrub
Moderately suitable	0-5	Open Forest
Least suitable	0-5	Dense Forest

## Suitability criteria for Continuous/Staggered contour trenches

Rank	Slope classes (Degrees)	Density Classes
Highly Suitable	>5 and <= 10	Blanks
Moderately Suitable	>5 and <= 10	Scrub forest
Least suitable	>5 and <= 10	Open forest
	> 10 and < 25	Blanks & scrubs
MPTs and SGPs	>5 and <= 10	Dense Forest
	> 10 and < 25	Open and Dense forest





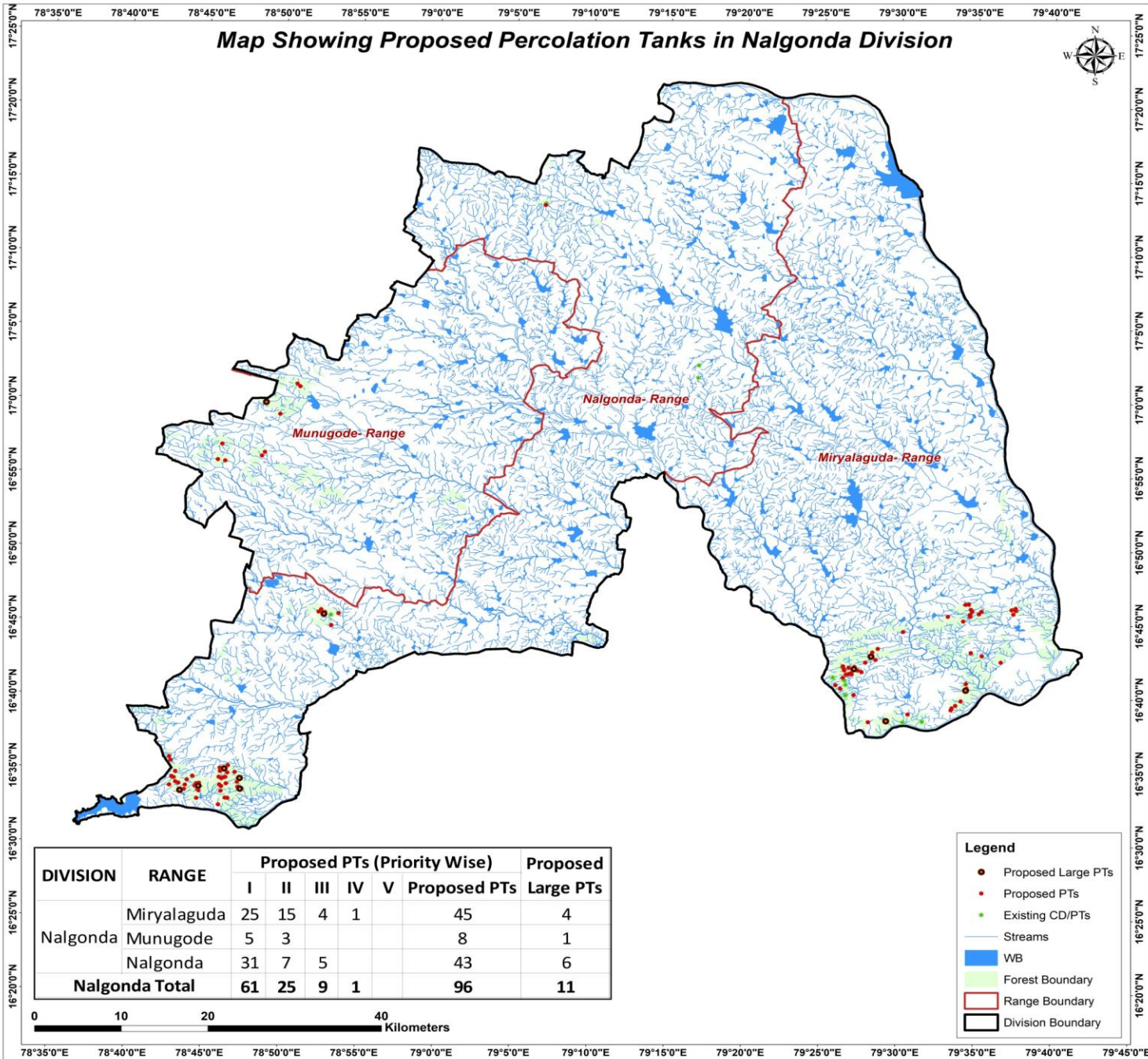
## PRIORITY CLASSES FOR PERCOLATION TANK

Priority	Catchment Area(Ha)	Density Class
1	0-25 0-25	Scrub Blank
2	0-25 25-50	Open Forest Blank
3	25-50 >50	Open Forest Scrub & blank
4	0-25 >50	Dense Forest Open Forest
5	25-50 >50	Dense Forest Dense Forest





# Map Showing Proposed Percolation Tanks in Nalgonda Division

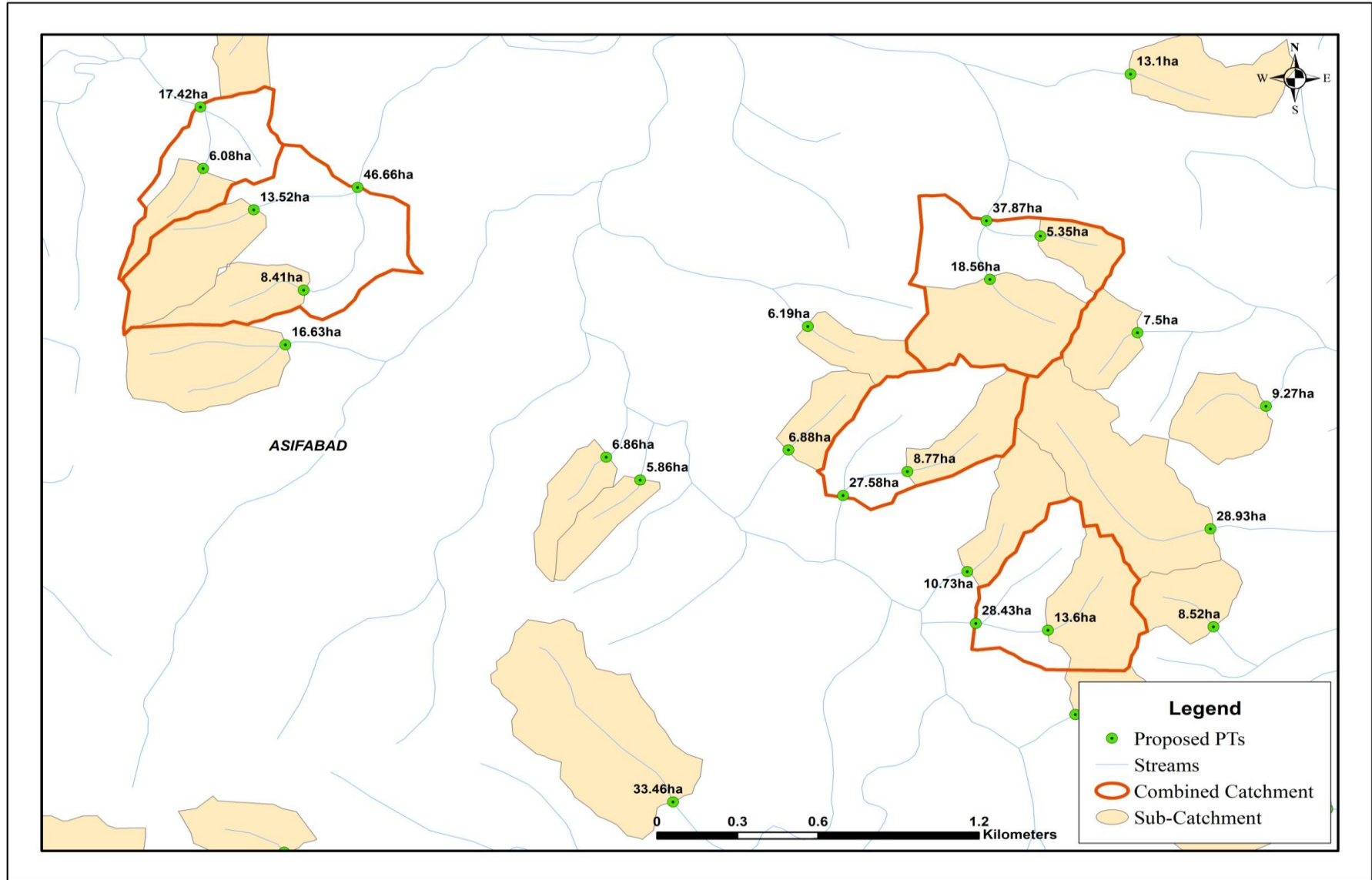


DIVISION	RANGE	Proposed PTs (Priority Wise)					Proposed PTs	Proposed Large PTs
		I	II	III	IV	V		
Nalgonda	Miryalaguda	25	15	4	1		45	4
	Munugode	5	3				8	1
	Nalgonda	31	7	5			43	6
<b>Nalgonda Total</b>		<b>61</b>	<b>25</b>	<b>9</b>	<b>1</b>		<b>96</b>	<b>11</b>

- Legend**
- Proposed Large PTs
  - Proposed PTs
  - Existing CD/PTs
  - Streams
  - WB
  - Forest Boundary
  - ▭ Range Boundary
  - ▭ Division Boundary



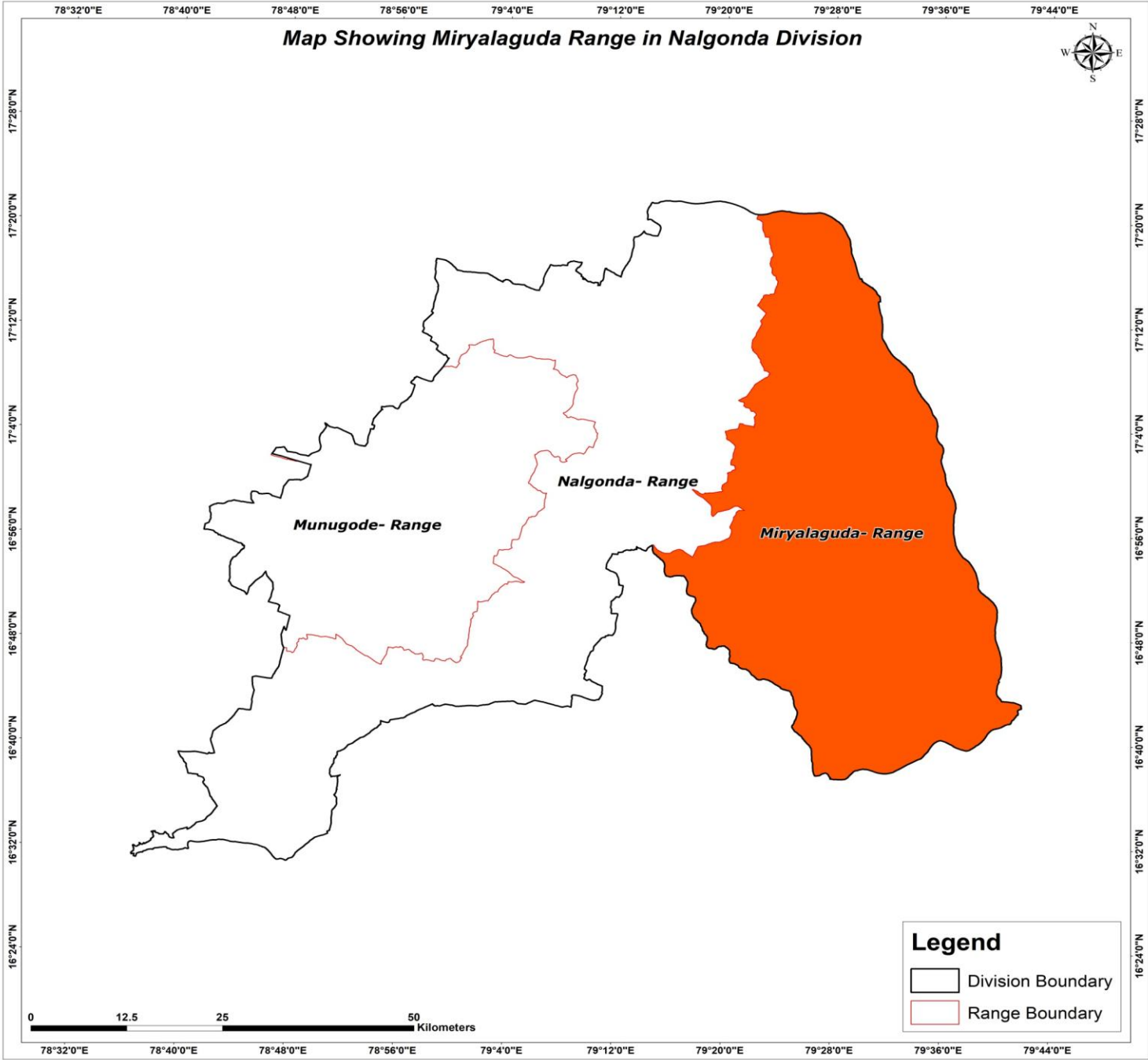
# CATCHMENT AREA



# Sample Catchment Map

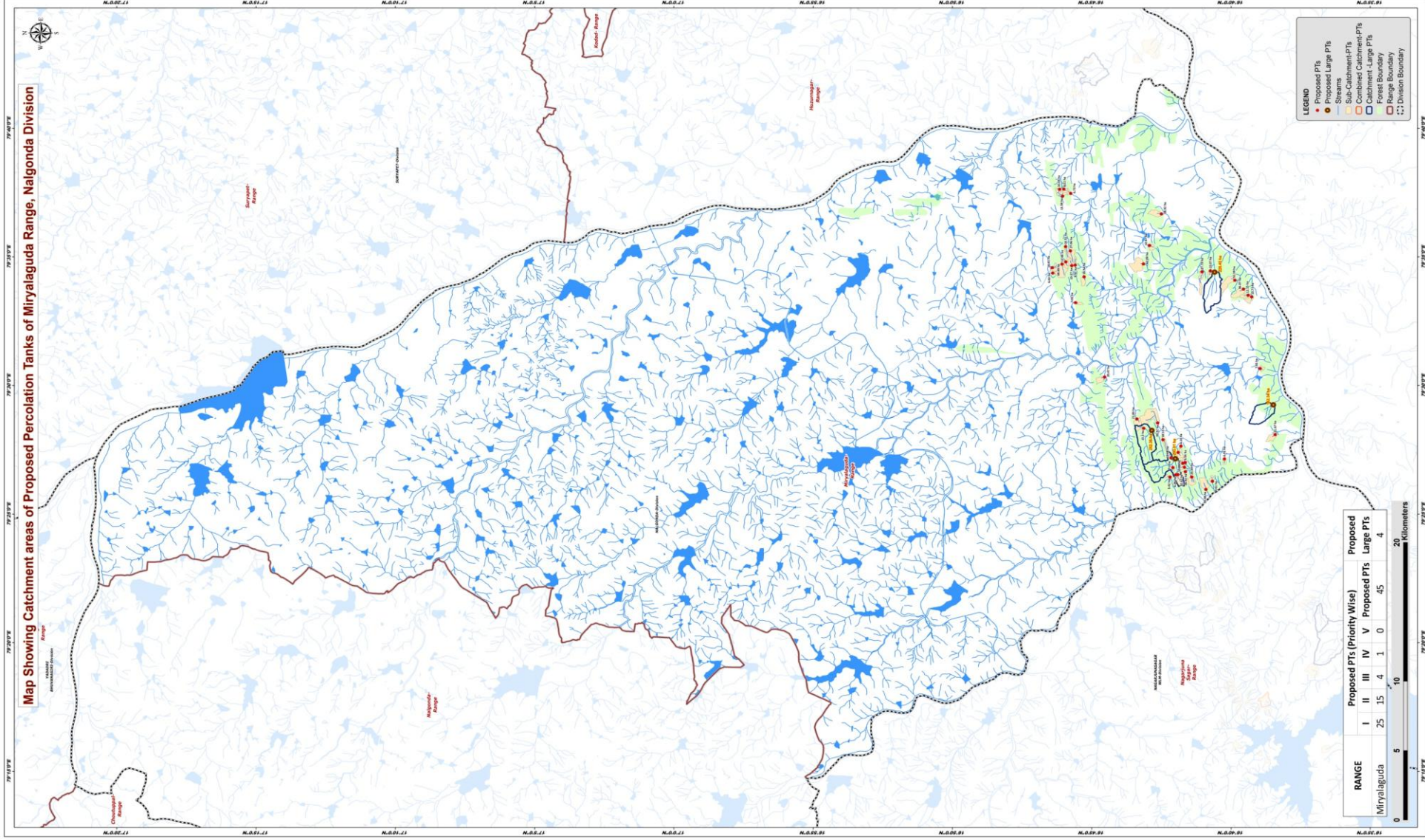


# Map Showing Miryalaguda Range in Nalgonda Division





Map Showing Catchment areas of Proposed Percolation Tanks of Miryalaguda Range, Nalgonda Division



RANGE	Proposed PTs (Priority Wise)					Proposed Large PTs
	I	II	III	IV	V	
Miryalaguda	25	15	4	1	0	45
						4

- LEGEND**
- Proposed PTs
  - Proposed Large PTs
  - Streams
  - Sub-Catchment-PTs
  - Combined Catchment-PTs
  - Catchment-Large PTs
  - Range Boundary
  - - - Division Boundary

## Beat wise Abstract of Proposed PT's – Miryalaguda Range

S. No.	Beat	Proposed PT's
1	ADAVIDEVULAPALLY	1
2	DAMARCHERLA	5
3	KALLEPALLY	1
4	KJR COLONY	9
5	MULKACHERLA	14
6	RAGADAPA	3
7	THALLA VEERAPPAGUDEM	7
8	THRIPURARAM	4
9	VEERLPALEM	1
	<b>Total</b>	<b>45</b>

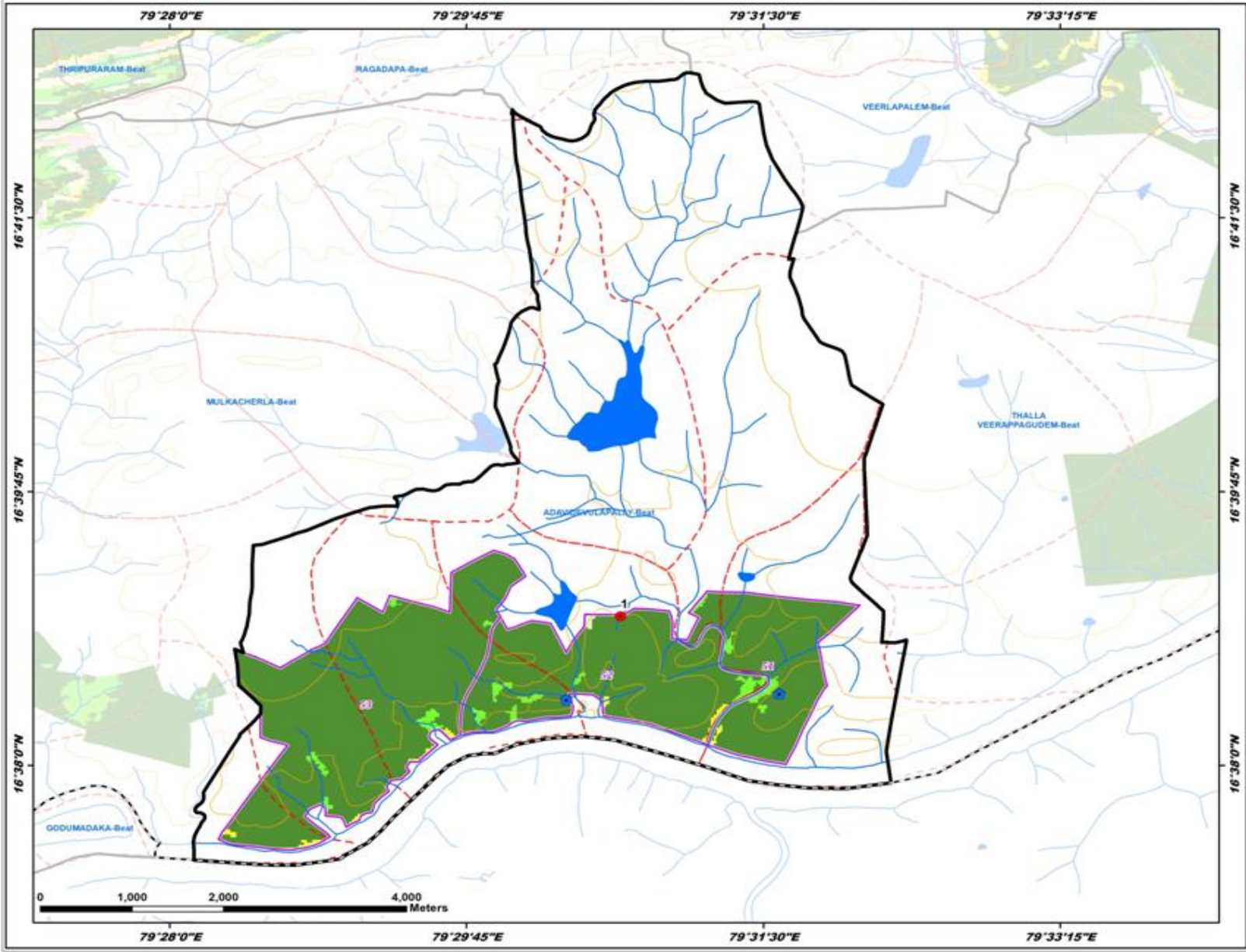
## List of Proposed PTs – Miryalaguda Range

ID	Latitude	Longitude	Catchment Area_Ha	Priority	Beat
1	16.649237	79.510974	7.92	I	ADAVIDEVULAPALLY
2	16.767416	79.622744	13.59	I	DAMARCHERLA
3	16.766714	79.627231	8.21	I	DAMARCHERLA
4	16.762562	79.624531	6.73	I	DAMARCHERLA
5	16.769175	79.627128	10.03	I	DAMARCHERLA
6	16.708284	79.611199	28.32	II	DAMARCHERLA
7	16.759676	79.553693	7.02	I	KALLEPALLY
8	16.765511	79.580135	12.44	I	KJR COLONY
9	16.761981	79.577611	10.27	I	KJR COLONY
10	16.759862	79.578056	8.97	I	KJR COLONY
11	16.773336	79.572890	6.02	I	KJR COLONY
12	16.754572	79.570427	16.34	I	KJR COLONY
13	16.765603	79.590009	16.51	I	KJR COLONY
14	16.773646	79.576363	16.41	I	KJR COLONY
15	16.762757	79.587299	27.06	II	KJR COLONY
16	16.767743	79.578648	49.49	II	KJR COLONY
17	16.693991	79.450135	6.54	I	MULKACHERLA
18	16.699723	79.442091	6.36	I	MULKACHERLA
19	16.690111	79.440722	23.69	I	MULKACHERLA
20	16.640226	79.468135	21.67	I	MULKACHERLA
21	16.698318	79.456622	13.97	II	MULKACHERLA
22	16.694541	79.447026	10.19	II	MULKACHERLA
23	16.677783	79.437938	9.61	II	MULKACHERLA
24	16.696623	79.460753	6.18	II	MULKACHERLA
25	16.701422	79.446865	7.10	II	MULKACHERLA
26	16.670613	79.452455	6.91	II	MULKACHERLA
27	16.695522	79.449595	10.88	II	MULKACHERLA
28	16.693908	79.444163	28.92	II	MULKACHERLA
29	16.698459	79.442256	32.62	III	MULKACHERLA
30	16.681693	79.432645	35.38	III	MULKACHERLA
31	16.654283	79.557497	15.77	I	THALLA VEERAPPAGUDEM
32	16.715417	79.590755	12.37	I	THALLA VEERAPPAGUDEM
33	16.678983	79.574324	13.07	I	THALLA VEERAPPAGUDEM
34	16.656357	79.558475	12.15	I	THALLA VEERAPPAGUDEM
35	16.683961	79.573671	27.73	II	THALLA VEERAPPAGUDEM
36	16.659239	79.562426	36.07	II	THALLA VEERAPPAGUDEM
37	16.664330	79.568228	52.59	III	THALLA VEERAPPAGUDEM
38	16.719023	79.578773	62.09	III	VEERLAPALEM
39	16.742262	79.505504	20.47	I	RAGADAPA
40	16.718901	79.472295	15.30	I	RAGADAPA
41	16.710499	79.475780	93.21	IV	RAGADAPA
42	16.722968	79.478310	21.83	I	THRIPURARAM
43	16.702528	79.453036	10.48	I	THRIPURARAM
44	16.703134	79.440712	5.42	II	THRIPURARAM
45	16.707332	79.464903	18.13	II	THRIPURARAM

# Map Showing Suitability Index for Construction of SMC Works of Adavidevulapally Beat



Division : Nalgonda  
Range : Miryalaguda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
1	16.649237	79.510974	7.92	1

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

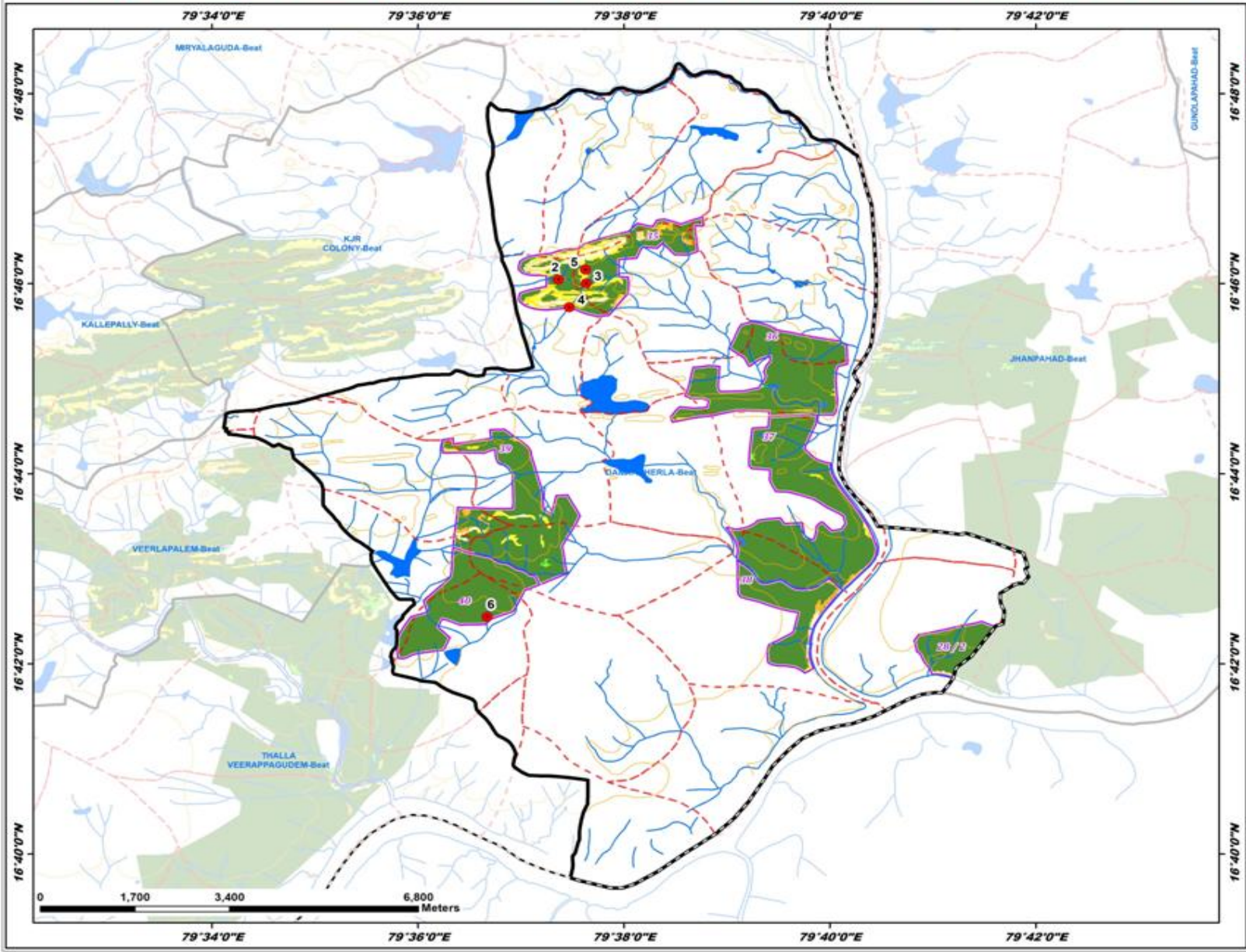
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Damarcherla Beat



Division : Nalgonda  
Range : Miryalaguda



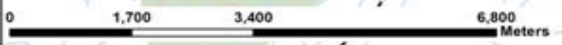
ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
2	16.767416	79.622744	13.59	I
3	16.766714	79.627231	8.21	I
4	16.762562	79.624531	6.73	I
5	16.769175	79.627128	10.03	I
6	16.768284	79.611199	28.32	II

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

**Suitability Index**

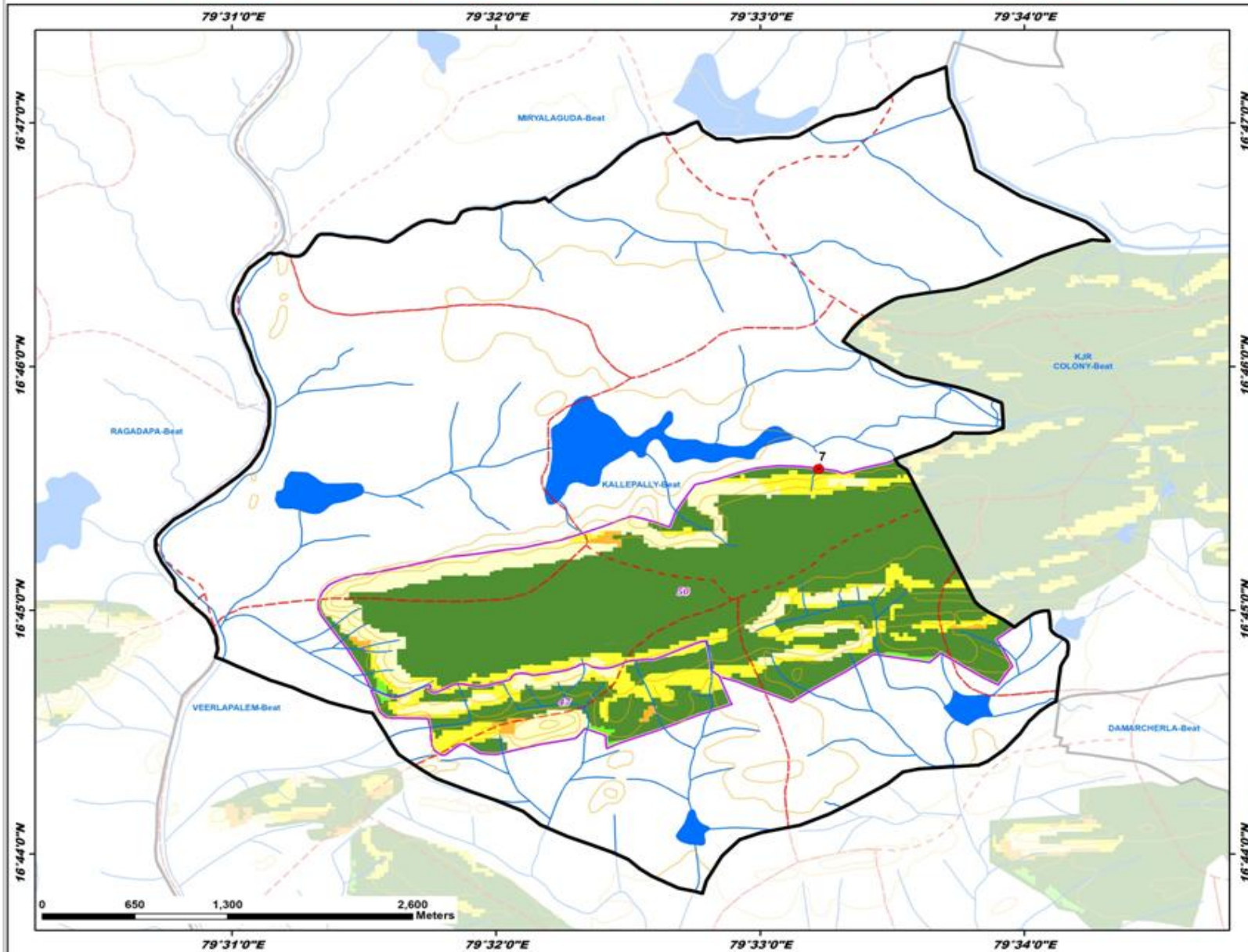
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



# Map Showing Suitability Index for Construction of SMC Works of Kallepally Beat



Division : Nalgonda  
Range : Miryalaguda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
7	16.759676	79.553693	7.02	1

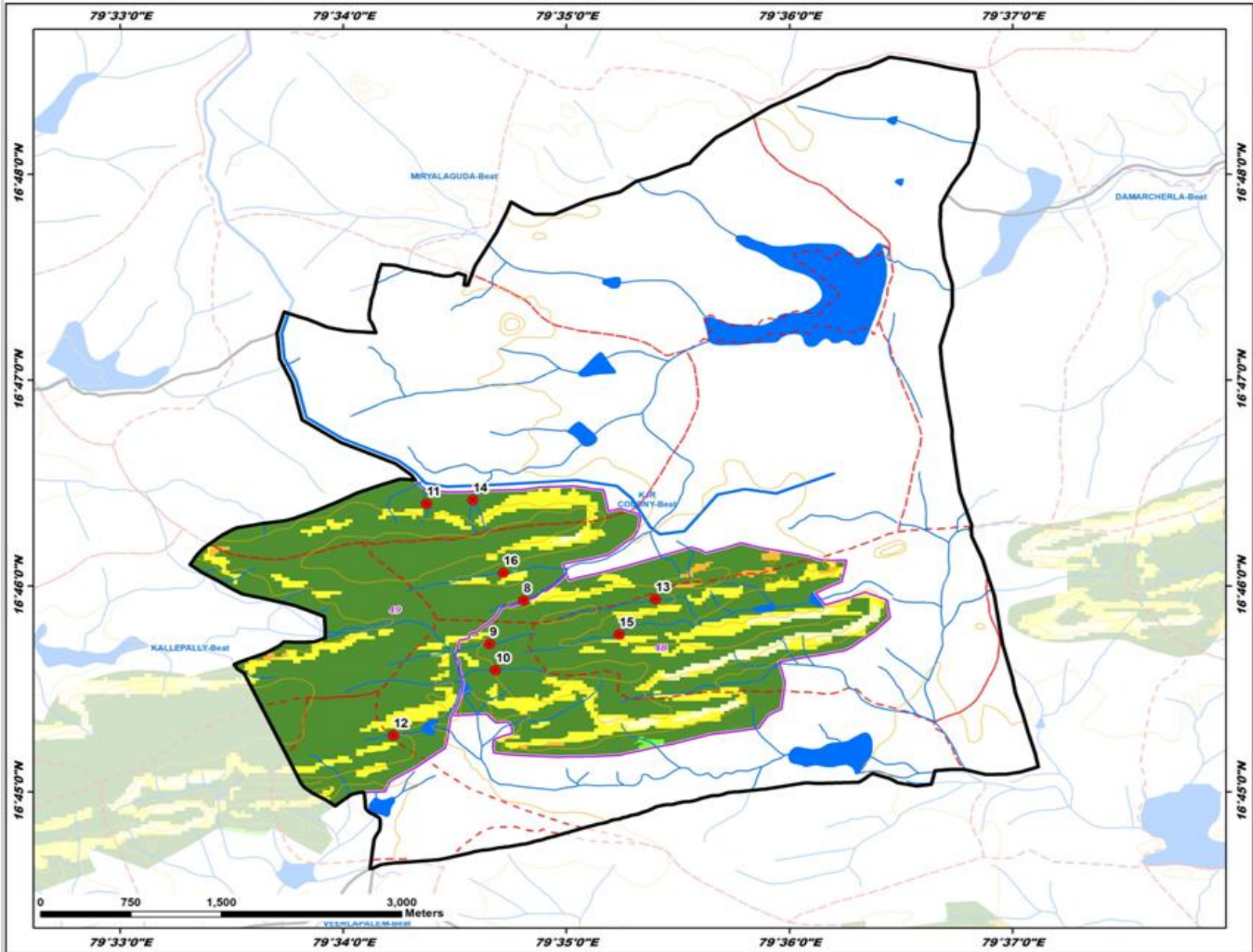
### LEGEND

- Proposed PTs
  - Existing CD/PTs
  - Contours
  - Streams
  - Watershed Boundary
  - Compartment Boundary
  - Beat Boundary
  - Division Boundary
- Suitability Index**
- CCTs/SCTs - Highly Suitable
  - CCTs/SCTs - Moderately Suitable
  - CCTs/SCTs - Least Suitable
  - PTs - Highly Suitable
  - PTs - Moderately Suitable
  - PTs - Least Suitable
  - MPTs and SGPs - Suitable
  - Not Suitable
  - Water Body

# Map Showing Suitability Index for Construction of SMC Works of KJR Colony Beat



Division : Nalgonda  
Range : Miryalaguda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
8	16.765511	79.580135	12.44	I
9	16.761981	79.577611	10.27	I
10	16.759862	79.578056	8.97	I
11	16.773336	79.572890	6.02	I
12	16.754572	79.570427	16.34	I
13	16.765603	79.590009	16.51	I
14	16.773646	79.576363	16.41	I
15	16.762757	79.587299	27.06	II
16	16.767743	79.578648	49.49	II

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

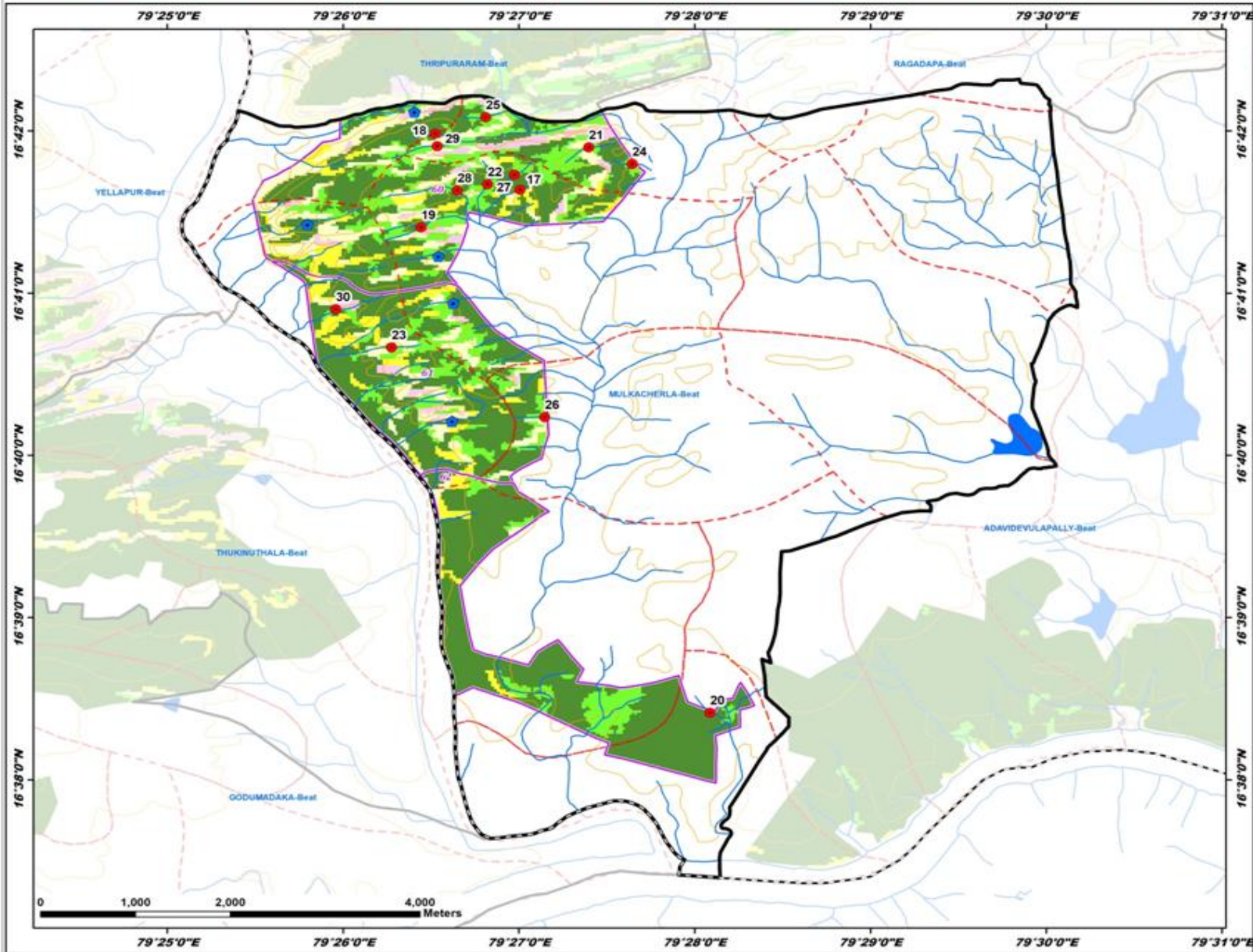
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Mulkacherla Beat



Division : Nalgonda  
Range : Miryalaguda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
17	16.693991	79.450135	6.54	I
18	16.699723	79.442091	6.36	I
19	16.690111	79.440722	23.69	I
20	16.640226	79.468135	21.67	I
21	16.698318	79.456622	13.97	II
22	16.694541	79.447026	10.19	II
23	16.677783	79.437938	9.61	II
24	16.696623	79.460793	6.18	II
25	16.701422	79.446865	7.10	II
26	16.670613	79.452455	6.91	II
27	16.695522	79.449595	10.88	II
28	16.693908	79.444163	28.92	II
29	16.698459	79.442256	32.62	III
30	16.681693	79.432645	35.38	III

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

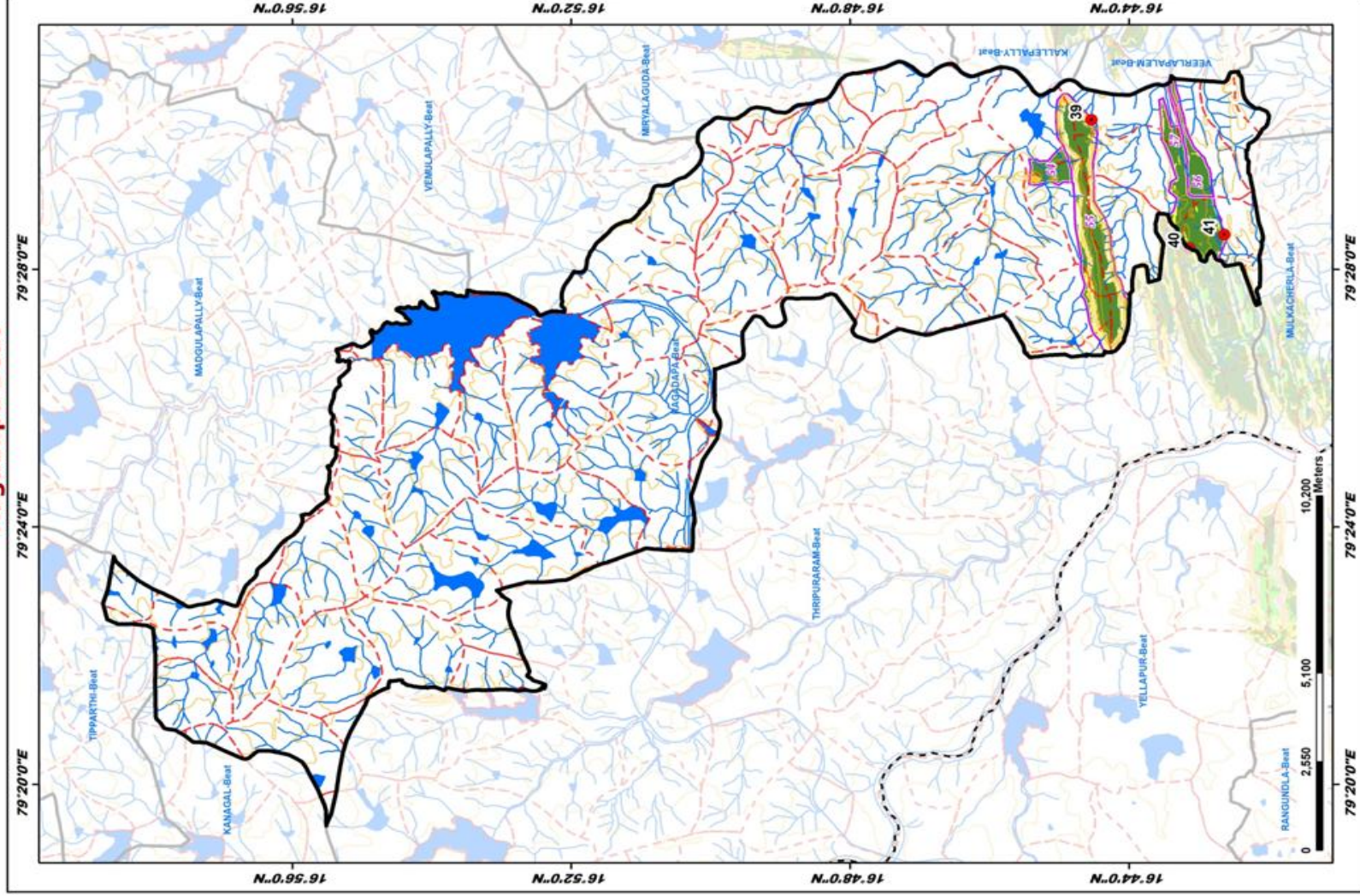
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Ragadapa Beat



Division : Nalgonda  
Range : Miryalaguda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
39	16.74252	79.50504	20.07	I
40	16.71801	79.47295	15.30	I
41	16.71069	79.47590	93.21	IV

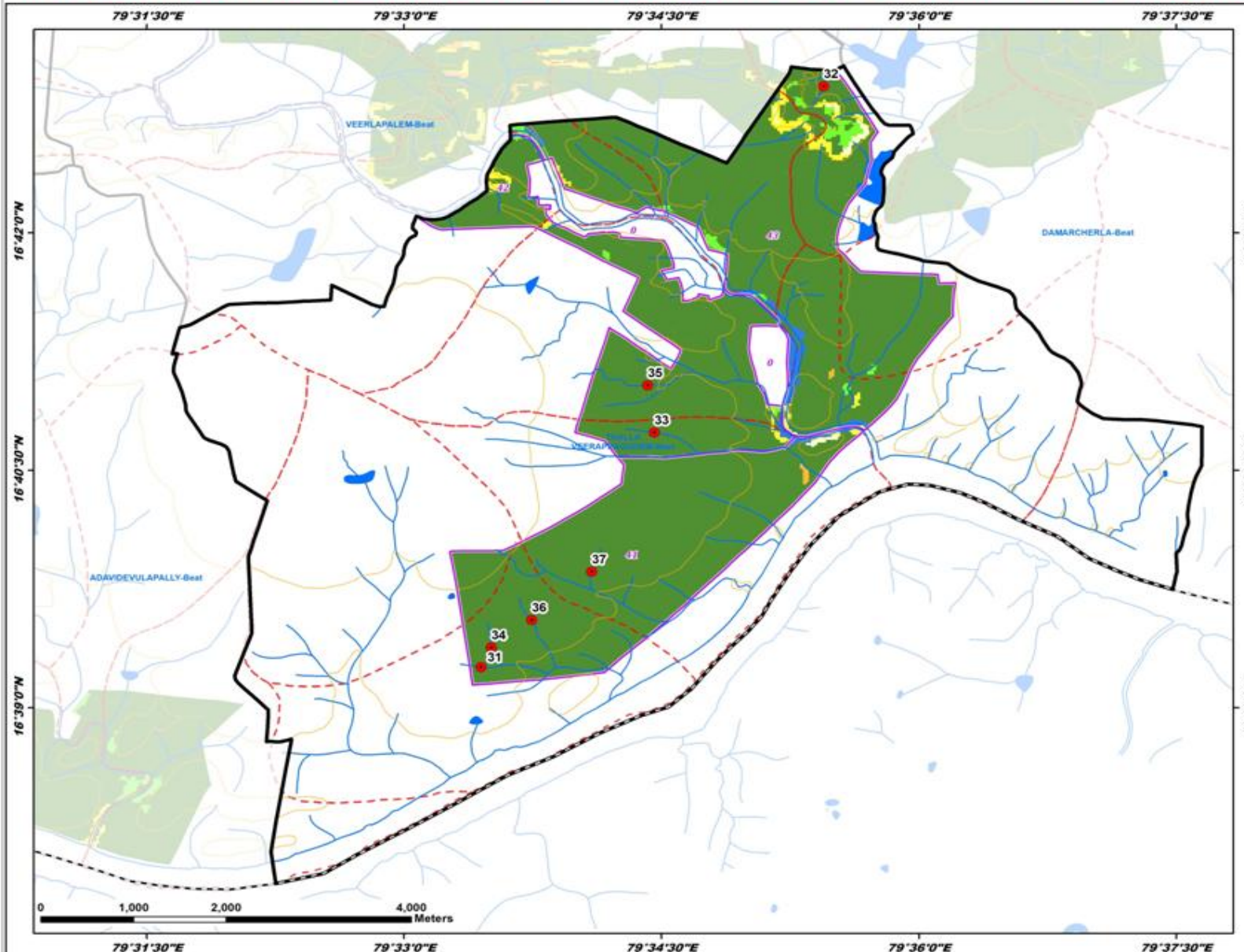
## LEGEND

- Proposed PTs
  - Existing CD/PTs
  - Contours
  - Streams
  - Watershed Boundary
  - Compartment Boundary
  - Beat Boundary
  - Division Boundary
- ### Suitability Index
- CCTs/SCTs - Highly Suitable
  - CCTs/SCTs - Moderately Suitable
  - CCTs/SCTs - Least Suitable
  - PTs - Highly Suitable
  - PTs - Moderately Suitable
  - PTs - Least Suitable
  - MP/TS and SGP/TS - Suitable
  - Not Suitable
  - Water Body

# Map Showing Suitability Index for Construction of SMC Works of Thalla Veerappagudem Beat



Division : Nalgonda  
Range : Miryalaguda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
31	16.654283	79.557497	15.77	I
32	16.715417	79.590755	12.37	I
33	16.678983	79.574324	13.07	I
34	16.656357	79.558475	12.15	I
35	16.683961	79.573671	27.73	II
36	16.659239	79.562426	36.07	II
37	16.664330	79.568228	52.59	III

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- ▭ Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

**Suitability Index**

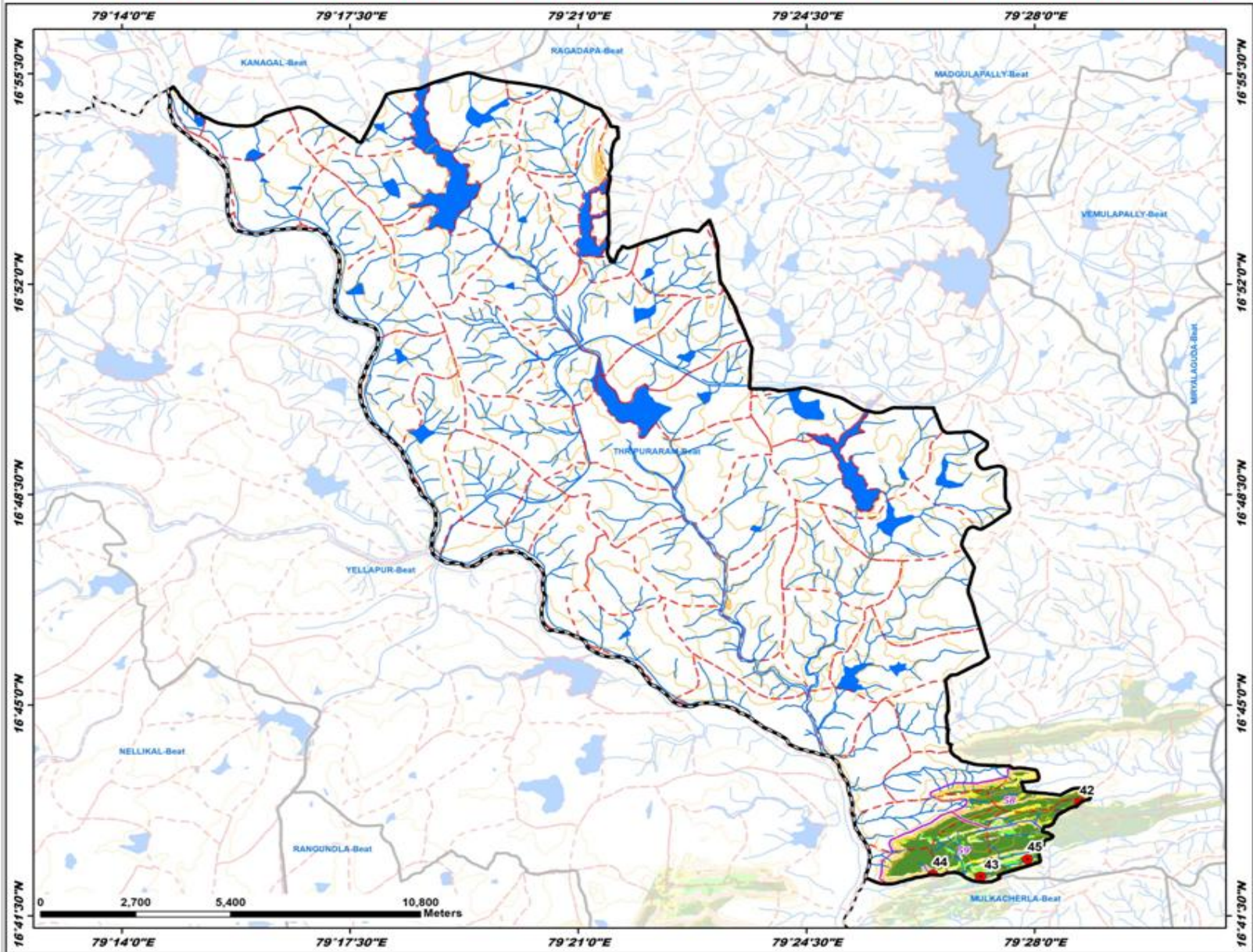
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



# Map Showing Suitability Index for Construction of SMC Works of Thripuraram Beat



Division : Nalgonda  
Range : Miryalaguda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
42	16.722968	79.478310	21.83	I
43	16.702528	79.453036	10.48	I
44	16.708134	79.440712	5.42	II
45	16.707332	79.464903	18.13	II

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

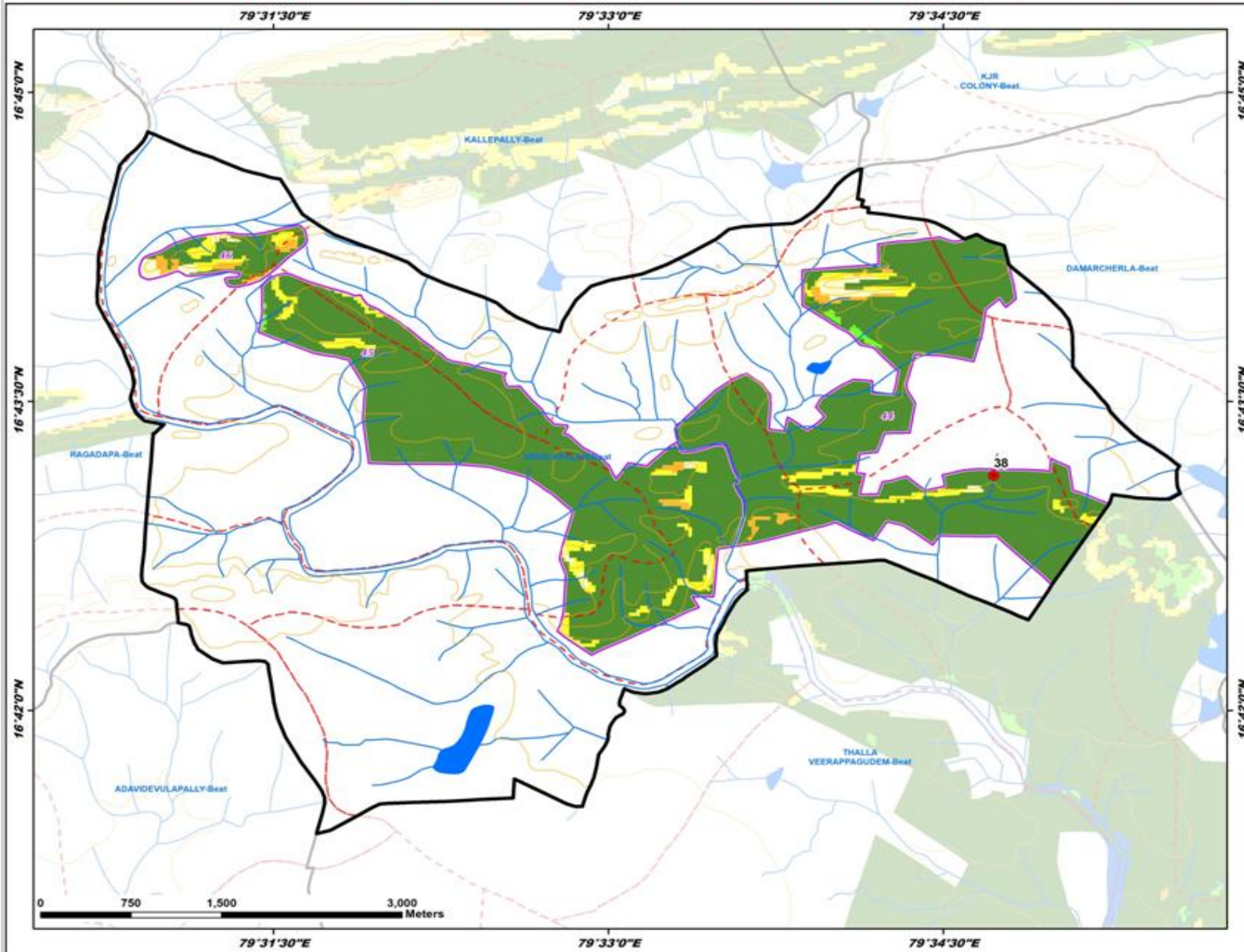
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Veerlapalem Beat



Division : Nalgonda  
Range : Miryalaguda

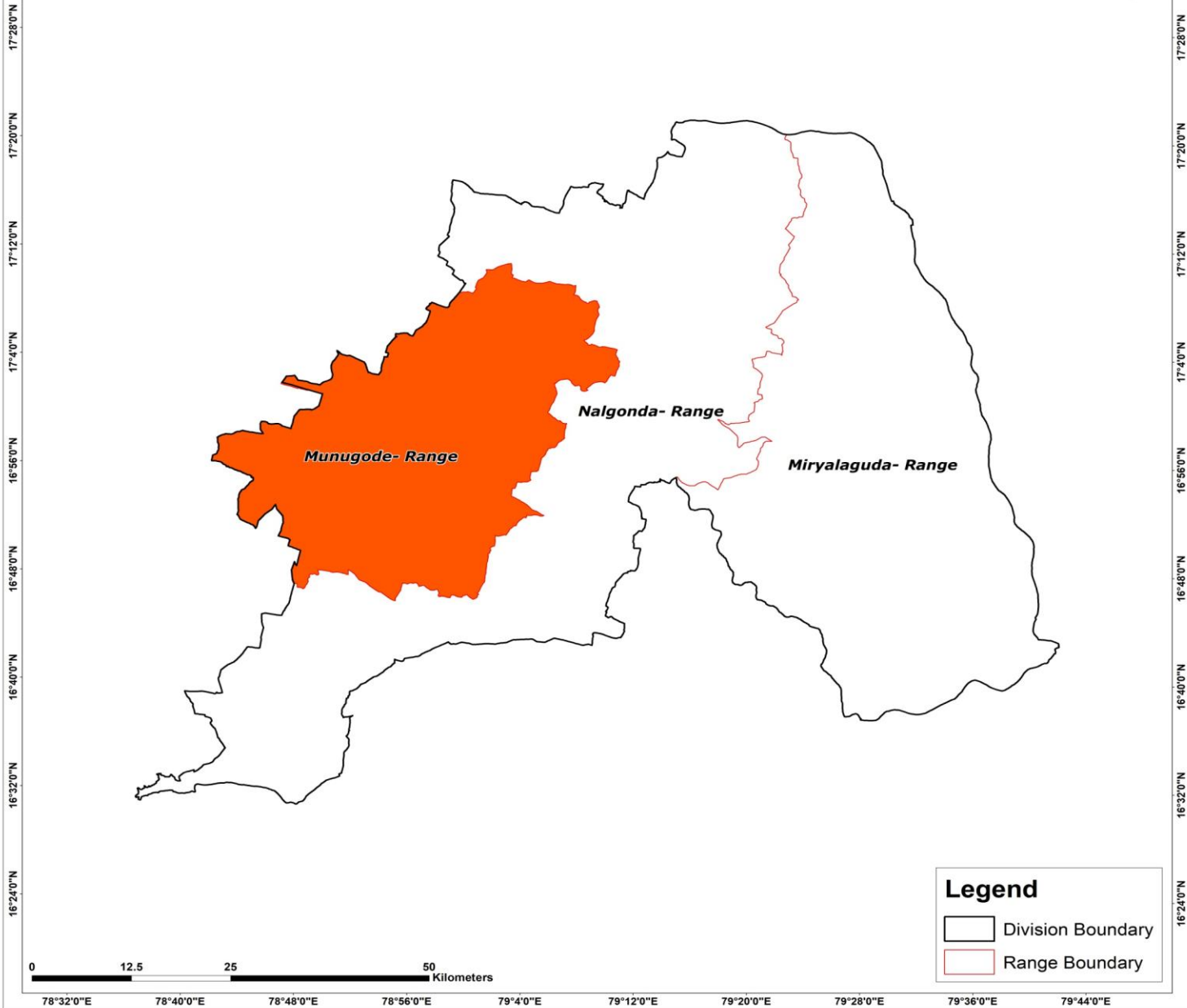


ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
38	16.719023	79.578773	62.09	III

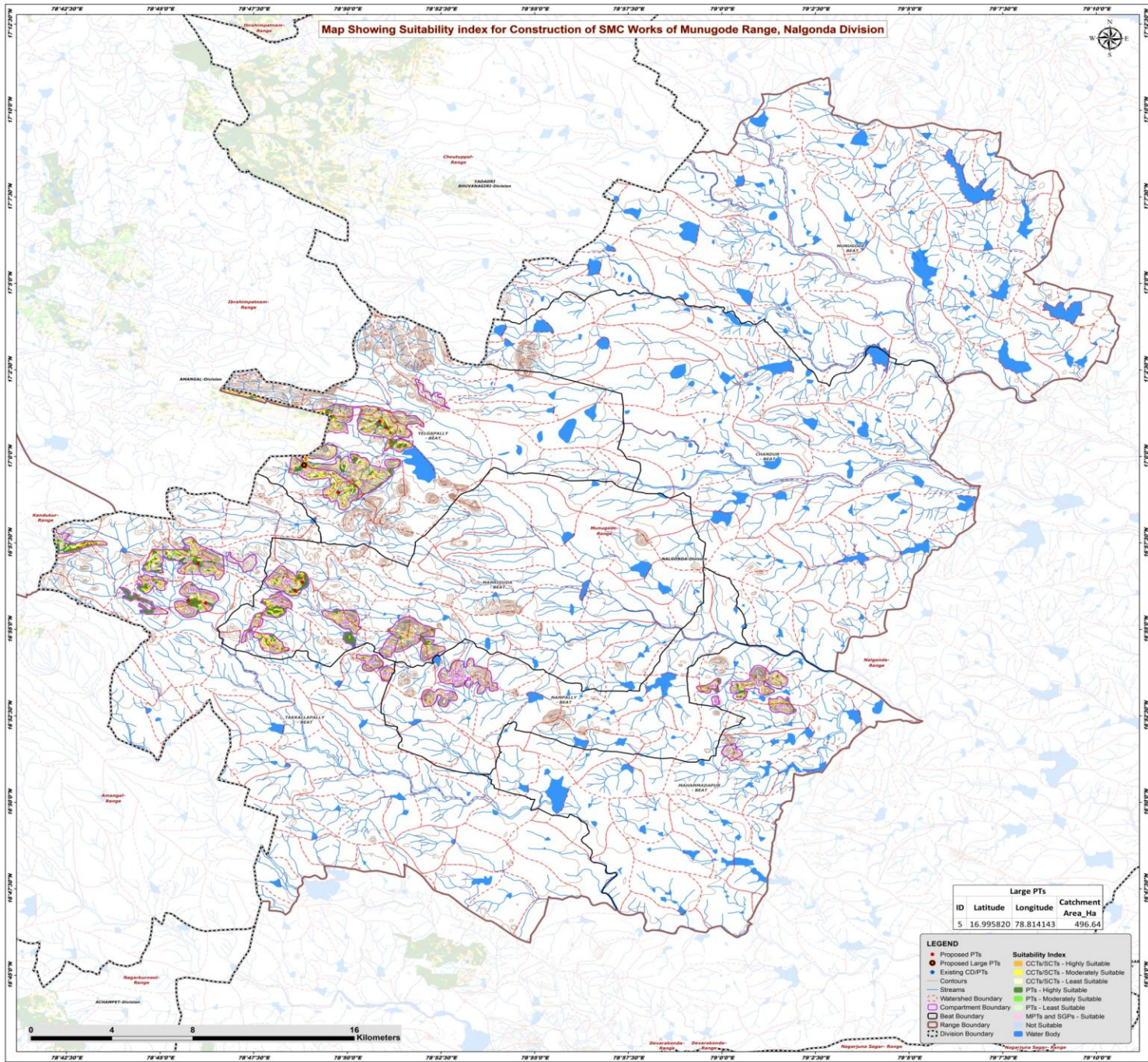
### LEGEND

- Proposed PTs
  - Existing CD/PTs
  - Contours
  - Streams
  - - - Watershed Boundary
  - - - Compartment Boundary
  - ▭ Beat Boundary
  - - - Division Boundary
- Suitability Index**
- CCTs/SCTs - Highly Suitable
  - CCTs/SCTs - Moderately Suitable
  - CCTs/SCTs - Least Suitable
  - PTs - Highly Suitable
  - PTs - Moderately Suitable
  - PTs - Least Suitable
  - MPTs and SGPs - Suitable
  - Not Suitable
  - Water Body

# Map Showing Munugode Range in Nalgonda Division



Map Showing Suitability index for Construction of SMC Works of Munugode Range, Nalgonda Division

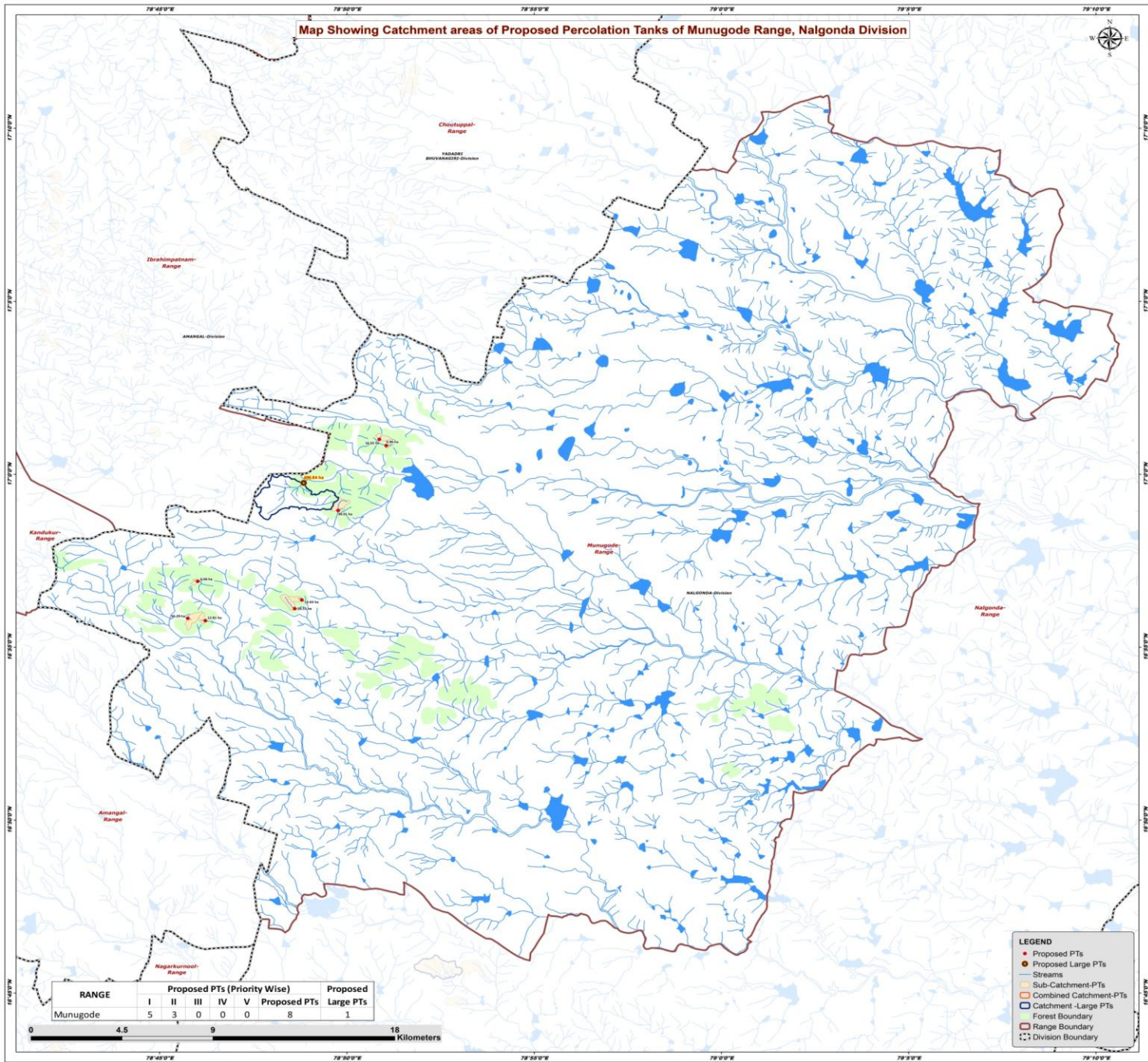


Large PTs			
ID	Latitude	Longitude	Catchment Area_Ha
5	16.995820	78.814143	496.64

- LEGEND**
- Proposed PTs
  - Proposed Large PTs
  - Existing CD/PTs
  - Contours
  - Streams
  - - - Watershed Boundary
  - - - Compartment Boundary
  - - - Beat Boundary
  - - - Range Boundary
  - - - Division Boundary
  - Suitability Index
  - CCTs/SCTs - Highly Suitable
  - CCTs/SCTs - Moderately Suitable
  - CCTs/SCTs - Least Suitable
  - PTs - Highly Suitable
  - PTs - Moderately Suitable
  - PTs - Least Suitable
  - MPTs and SOTPs - Suitable
  - Not Suitable
  - Water Body

0 4 8 16 Kilometers

Map Showing Catchment areas of Proposed Percolation Tanks of Munugode Range, Nalgonda Division



## Beat wise Abstract of Proposed PT's – Munugode Range

S. No.	Beat	Proposed PT's
1	MARRIGUDA	2
2	TAKKALLAPALLY	3
3	YELGAPALLY	3
	<b>Total</b>	<b>8</b>

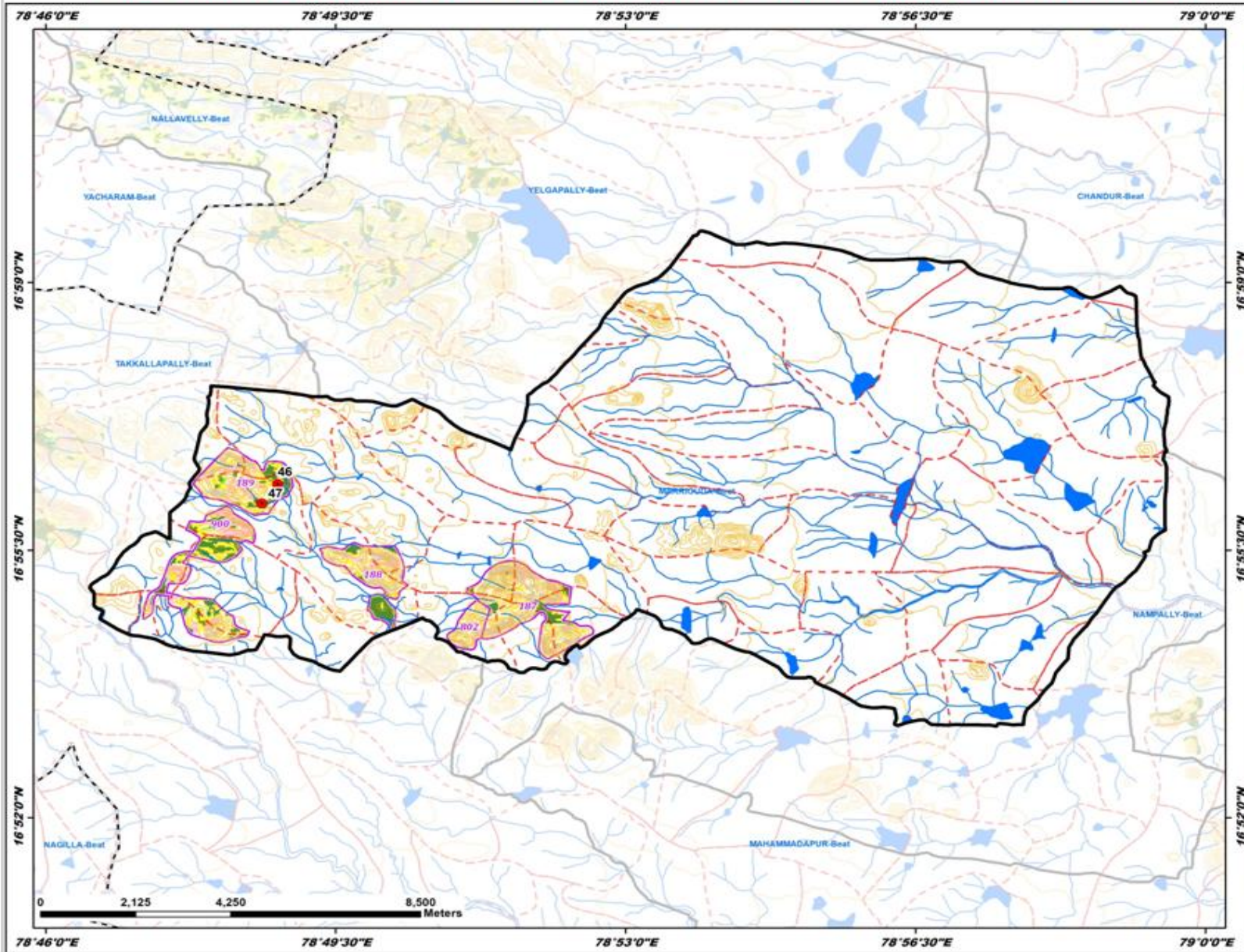
## List of Proposed PTs – Munugode Range

ID	Latitude	Longitude	Catchment Area_Ha	Priority	Beat
46	16.939417	78.813310	14.64	I	MARRIGUDA
47	16.935236	78.810131	28.53	II	MARRIGUDA
48	16.948405	78.766993	6.36	I	TAKKALLAPALLY
49	16.929440	78.770406	12.81	I	TAKKALLAPALLY
50	16.930597	78.762535	34.29	II	TAKKALLAPALLY
51	17.016802	78.847790	16.02	I	YELGAPALLY
52	17.013816	78.850866	6.96	I	YELGAPALLY
53	16.982561	78.829437	39.01	II	YELGAPALLY

# Map Showing Suitability Index for Construction of SMC Works of Marriguda Beat



Division : Nalgonda  
Range : Munugode



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
46	16.999417	78.813310	14.64	I
47	16.995236	78.810181	28.53	II

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

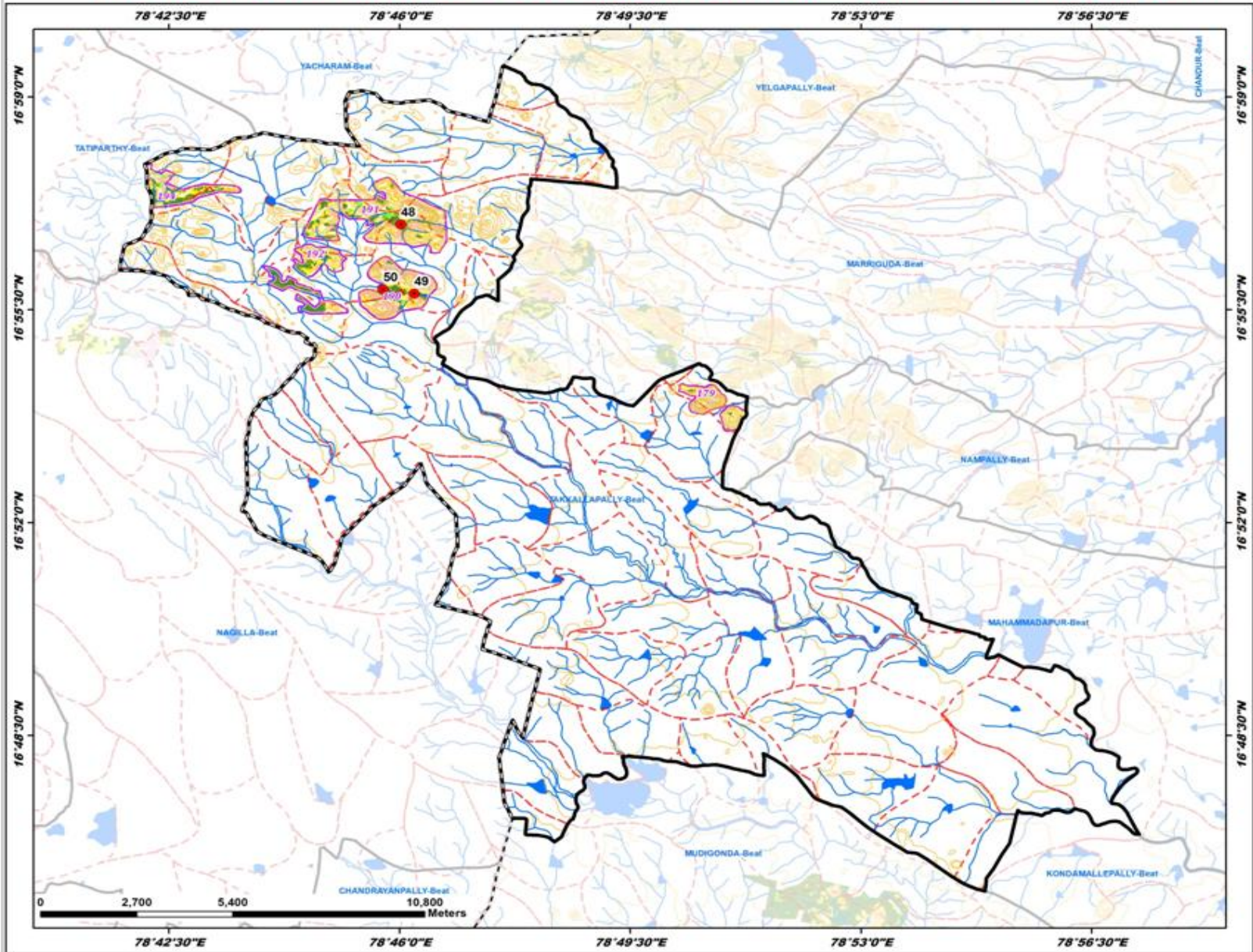
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Takkallapally Beat



Division : Nalgonda  
Range : Munugode



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
48	16.948405	78.766993	6.36	I
49	16.929440	78.770406	12.81	I
50	16.930597	78.762535	34.29	II

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

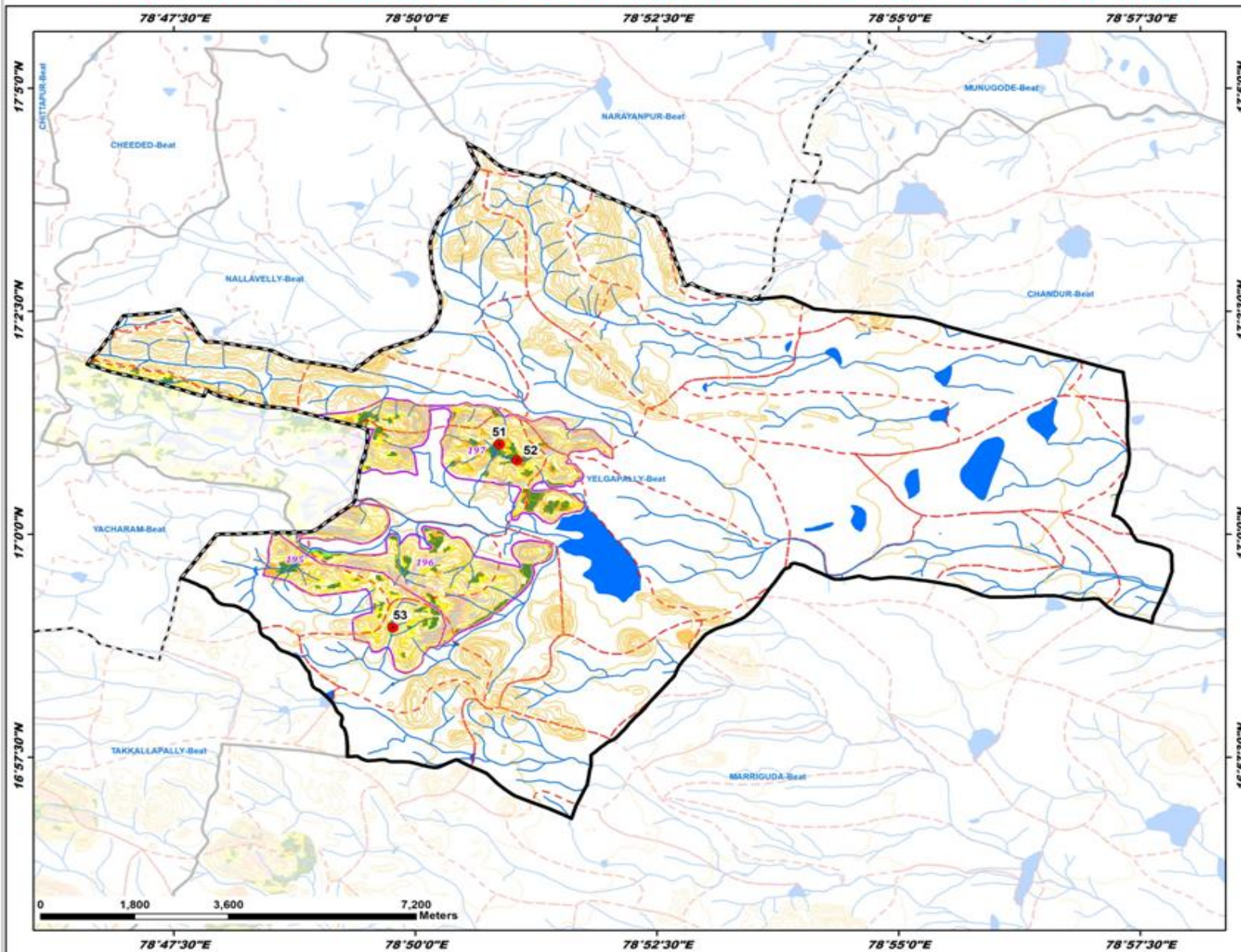
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Yelgapally Beat



Division : Nalgonda  
Range : Munugode



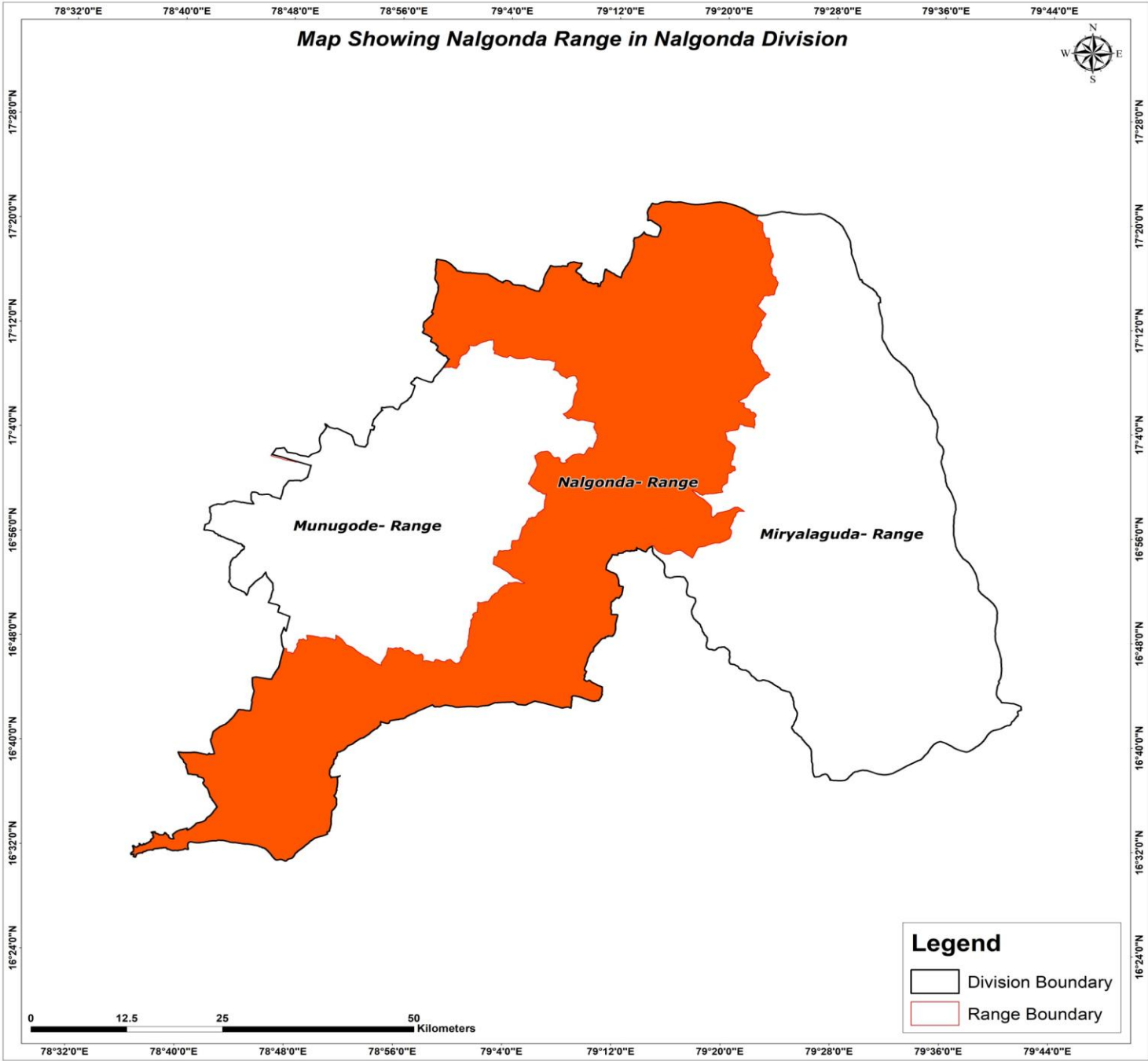
ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
51	17.016802	78.847790	16.02	I
52	17.013816	78.850866	6.96	I
53	16.982561	78.829437	39.01	II

**LEGEND**

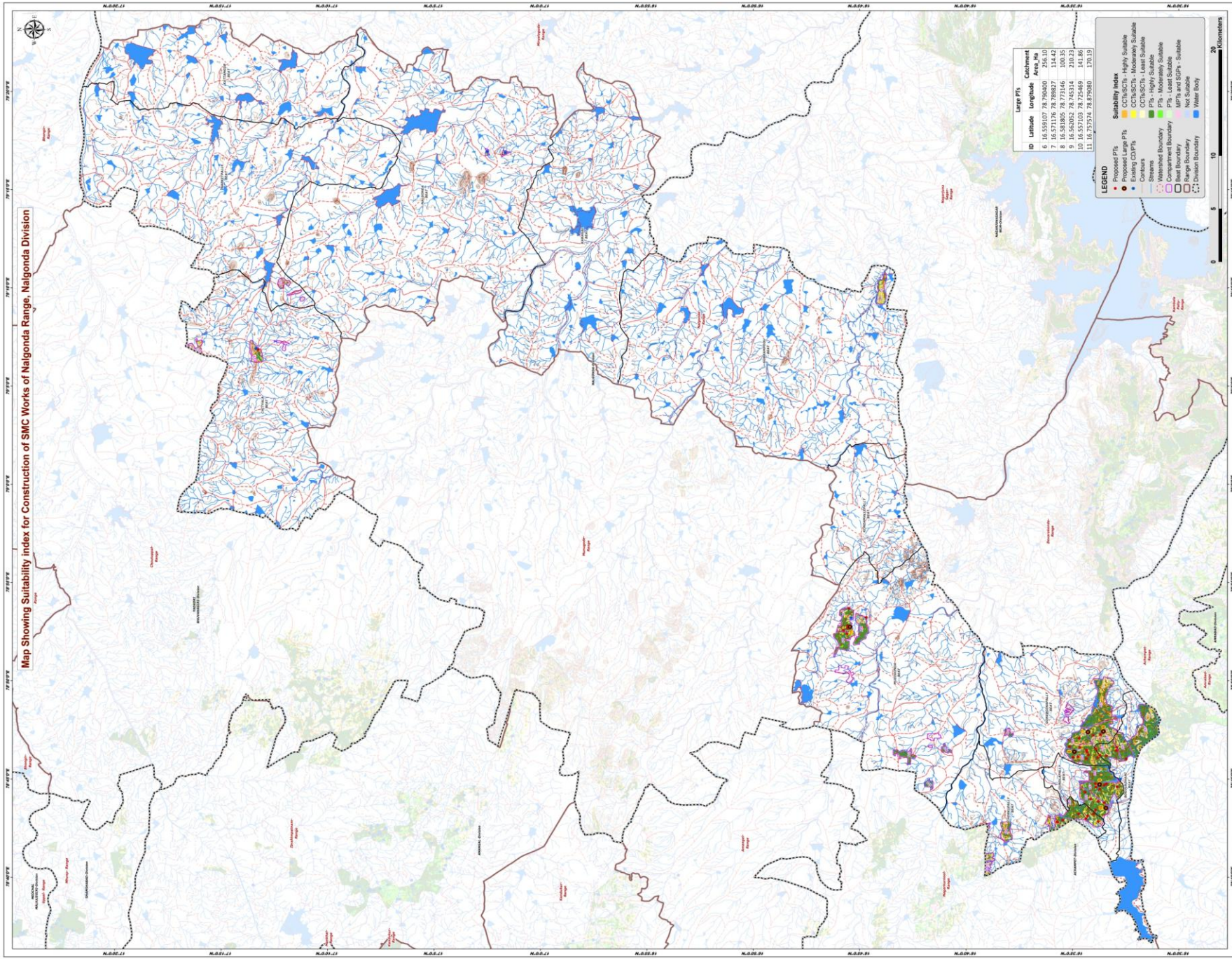
- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



Map Showing Suitability index for Construction of SMC Works of Nalgonda Range, Nalgonda Division



ID	Latitude	Longitude	Catchment Area (Sq. Km)
6	16.559107	78.790400	114.42
7	16.571176	78.789827	114.42
8	16.581805	78.773146	100.35
9	16.567092	78.545314	210.21
10	16.575374	78.572980	170.93

**LEGEND**

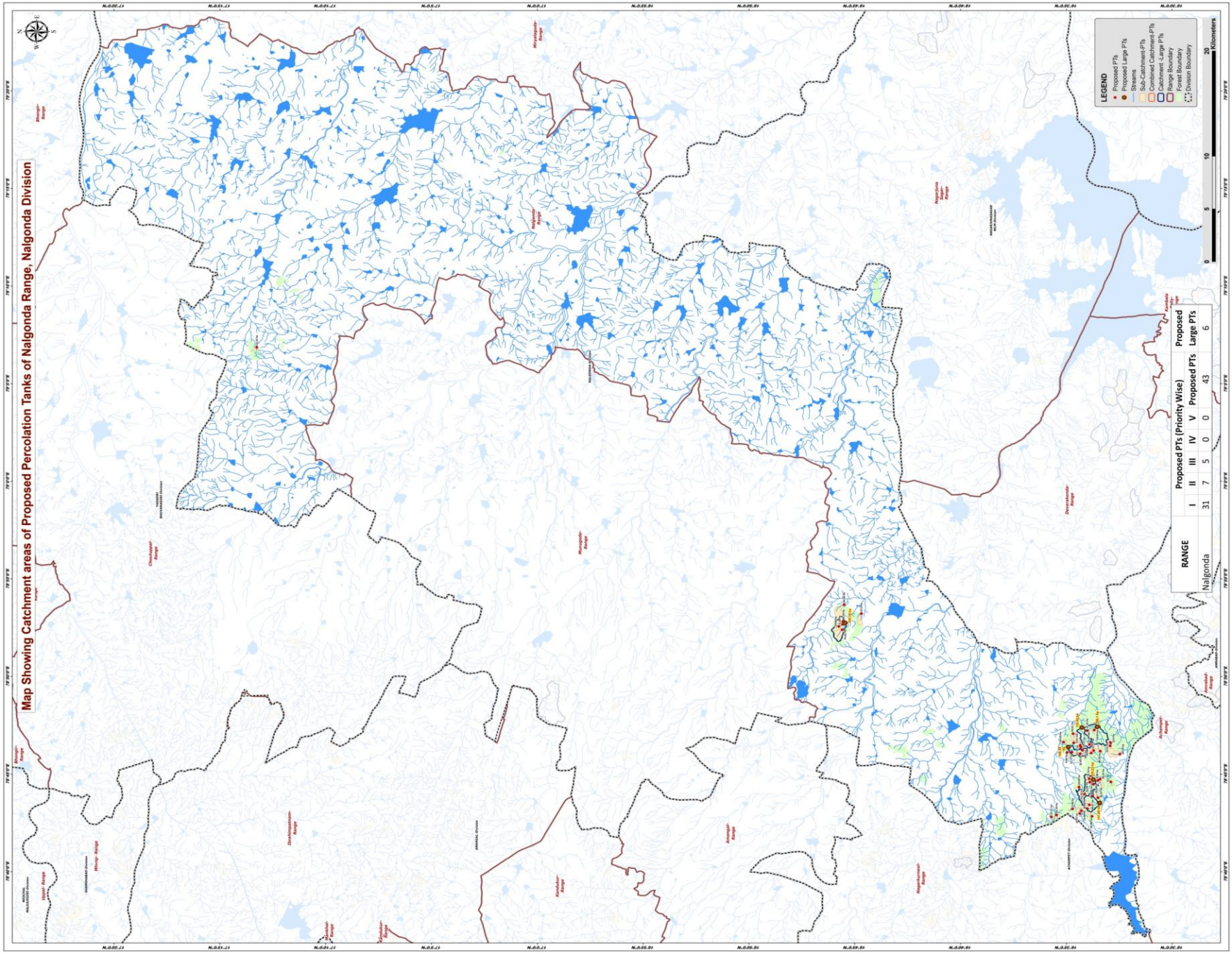
- Proposed P/W
- Existing P/W
- Contours
- Streams
- Waterbed Boundary
- Range Boundary
- Beat Boundary
- Division Boundary

**Suitability Index**

- Highly Suitable
- CCB/SCTB - Moderate Suitable
- CCB/SCTB - Least Suitable
- P/W - Highly Suitable
- P/W - Moderate Suitable
- P/W - Least Suitable
- MFTs and SMCs - Suitable
- MFTs and SMCs - Not Suitable
- Water Body

0 5 10 20 Kilometers

**Map Showing Catchment areas of Proposed Percolation Tanks of Nalgonda Range, Nalgonda Division**



- LEGEND**
- Proposed P.T.s
  - Proposed Large P.T.s
  - Sub-Catchment P.T.s
  - Catchment - Large P.T.s
  - ▭ Range Boundary
  - ▨ Forest Boundary
  - ⋯ Division Boundary

RANGE	Proposed P.T.s (Priority Wise)					Proposed Large P.T.s	
	I	II	III	IV	V	Proposed P.T.s	Large P.T.s
Nalgonda	31	7	5	0	0	43	6

## Beat wise Abstract of Proposed PT's – Nalgonda Range

S. No.	Beat	Proposed PT's
1	BOGULADHANI	4
2	CHERKUPALLY	7
3	CHITYALA	1
4	GONEBOINAPALLY	14
5	GUNDLAPALLY	11
6	MUDIGONDA	6
	<b>Total</b>	<b>43</b>

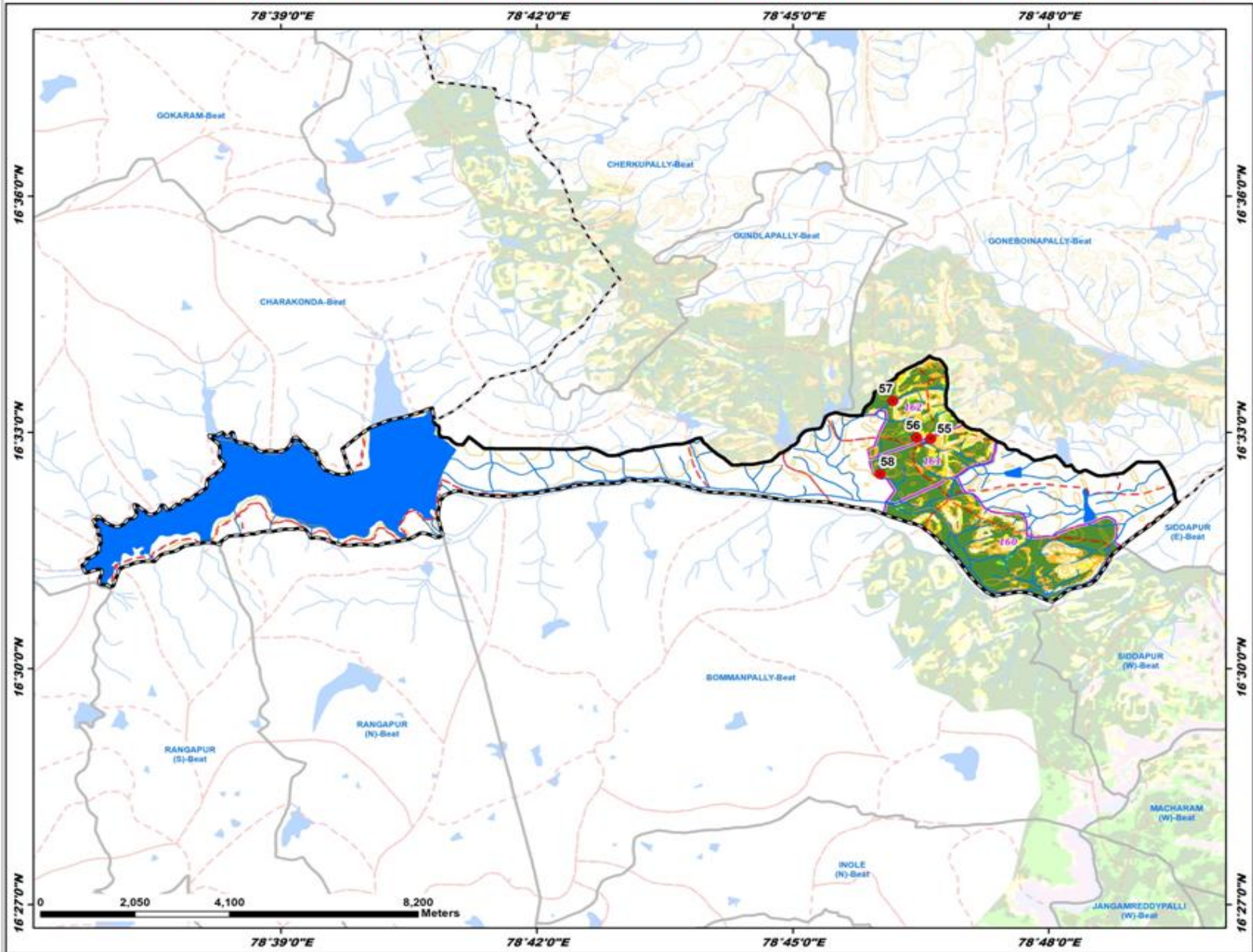
## List of Proposed PTs – Nalgonda Range

ID	Latitude	Longitude	Catchment Area_Ha	Priority	Beat
54	17.220899	79.114489	13.16	I	CHITYALA
55	16.548688	78.776991	12.10	I	BOGULADHANI
56	16.548892	78.774231	12.80	I	BOGULADHANI
57	16.556655	78.769599	48.39	II	BOGULADHANI
58	16.541199	78.767073	62.19	III	BOGULADHANI
59	16.571542	78.718766	15.66	I	CHERKUPALLY
60	16.572704	78.716382	13.57	I	CHERKUPALLY
61	16.563190	78.713917	20.86	I	CHERKUPALLY
62	16.578510	78.720477	5.66	I	CHERKUPALLY
63	16.595187	78.713587	19.11	I	CHERKUPALLY
64	16.566813	78.720516	9.18	I	CHERKUPALLY
65	16.591037	78.715199	42.33	II	CHERKUPALLY
66	16.561889	78.770154	22.53	I	GONEBOINAPALLY
67	16.572383	78.774647	12.78	I	GONEBOINAPALLY
68	16.566940	78.787210	12.25	I	GONEBOINAPALLY
69	16.577447	78.776709	8.51	I	GONEBOINAPALLY
70	16.571876	78.772918	14.72	I	GONEBOINAPALLY
71	16.561340	78.787731	8.24	I	GONEBOINAPALLY
72	16.578998	78.768899	12.72	I	GONEBOINAPALLY
73	16.582760	78.768486	9.66	I	GONEBOINAPALLY
74	16.570731	78.770401	14.20	I	GONEBOINAPALLY
75	16.572420	78.767444	16.83	I	GONEBOINAPALLY
76	16.565105	78.775327	11.89	I	GONEBOINAPALLY
77	16.585631	78.777335	14.23	I	GONEBOINAPALLY
78	16.563773	78.768017	14.75	I	GONEBOINAPALLY
79	16.578027	78.784638	55.67	III	GONEBOINAPALLY
80	16.563162	78.731005	5.94	I	GUNDLAPALLY
81	16.562073	78.741515	8.02	I	GUNDLAPALLY
82	16.573370	78.738991	13.44	I	GUNDLAPALLY
83	16.548260	78.743482	9.50	I	GUNDLAPALLY
84	16.565364	78.746087	19.74	I	GUNDLAPALLY
85	16.564821	78.743197	13.06	I	GUNDLAPALLY
86	16.558508	78.744713	8.06	I	GUNDLAPALLY
87	16.565180	78.723848	18.21	II	GUNDLAPALLY
88	16.558372	78.729939	36.57	II	GUNDLAPALLY
89	16.556763	78.745830	29.22	II	GUNDLAPALLY
90	16.568987	78.733025	61.03	III	GUNDLAPALLY
91	16.759504	78.878016	6.28	I	MUDIGONDA
92	16.762578	78.876207	23.36	I	MUDIGONDA
93	16.759410	78.880297	30.23	II	MUDIGONDA
94	16.744779	78.887111	37.20	II	MUDIGONDA
95	16.759941	78.873311	74.62	III	MUDIGONDA
96	16.758367	78.894832	64.06	III	MUDIGONDA

# Map Showing Suitability Index for Construction of SMC Works of Boguladhani Beat



Division : Nalgonda  
Range : Nalgonda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
55	16.548688	78.776091	12.10	I
56	16.548892	78.774231	12.80	I
57	16.556655	78.769599	48.39	II
58	16.541199	78.767073	62.19	III

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

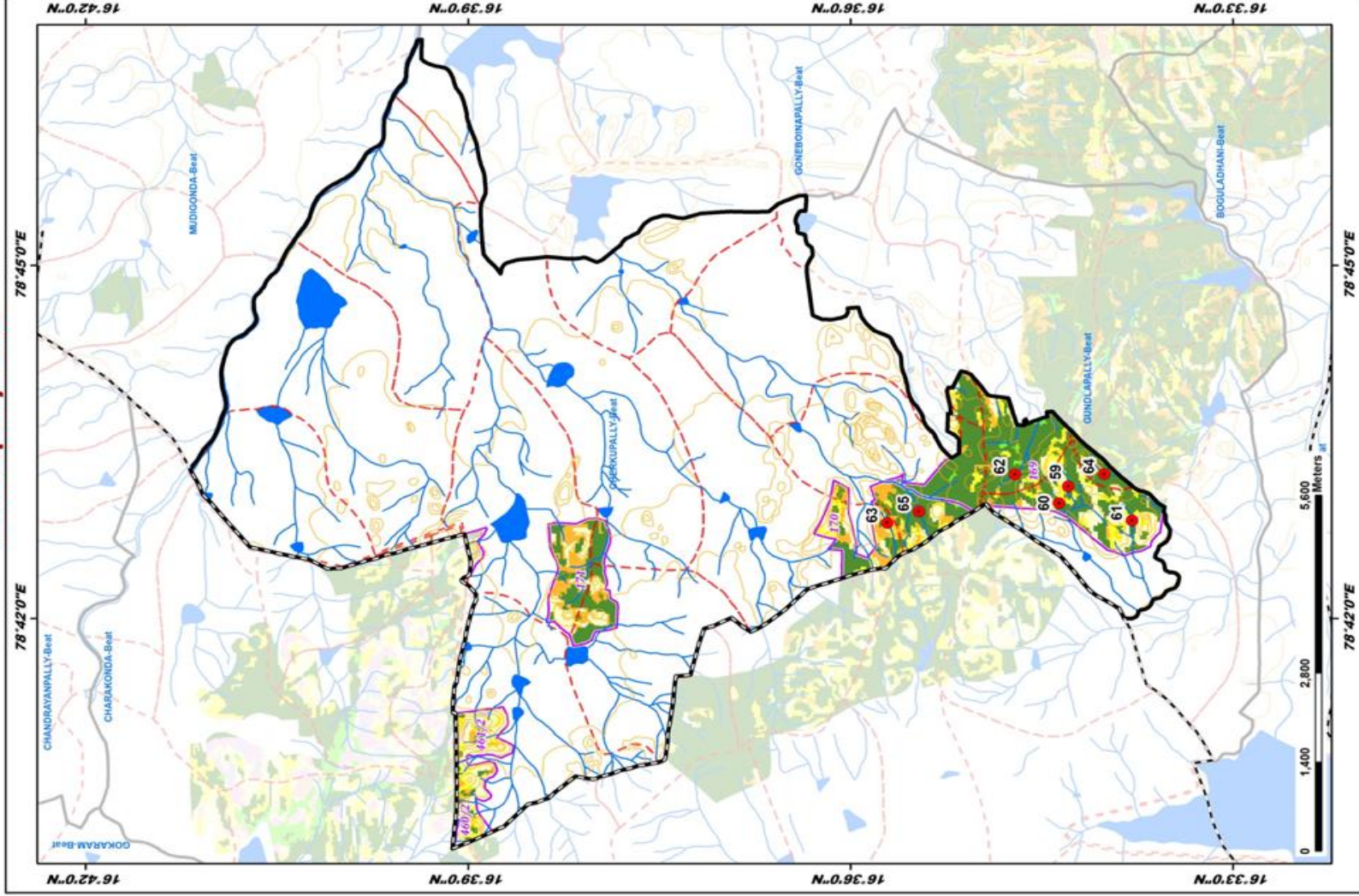
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Cherkupally Beat



Division : Nalgonda  
Range : Nalgonda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
59	16.571542	78.718766	15.66	I
60	16.572704	78.716382	13.57	I
61	16.563190	78.713917	20.86	I
62	16.578510	78.720077	5.66	I
63	16.595187	78.713587	19.11	I
64	16.566813	78.720516	9.18	I
65	16.591637	78.715199	42.33	II

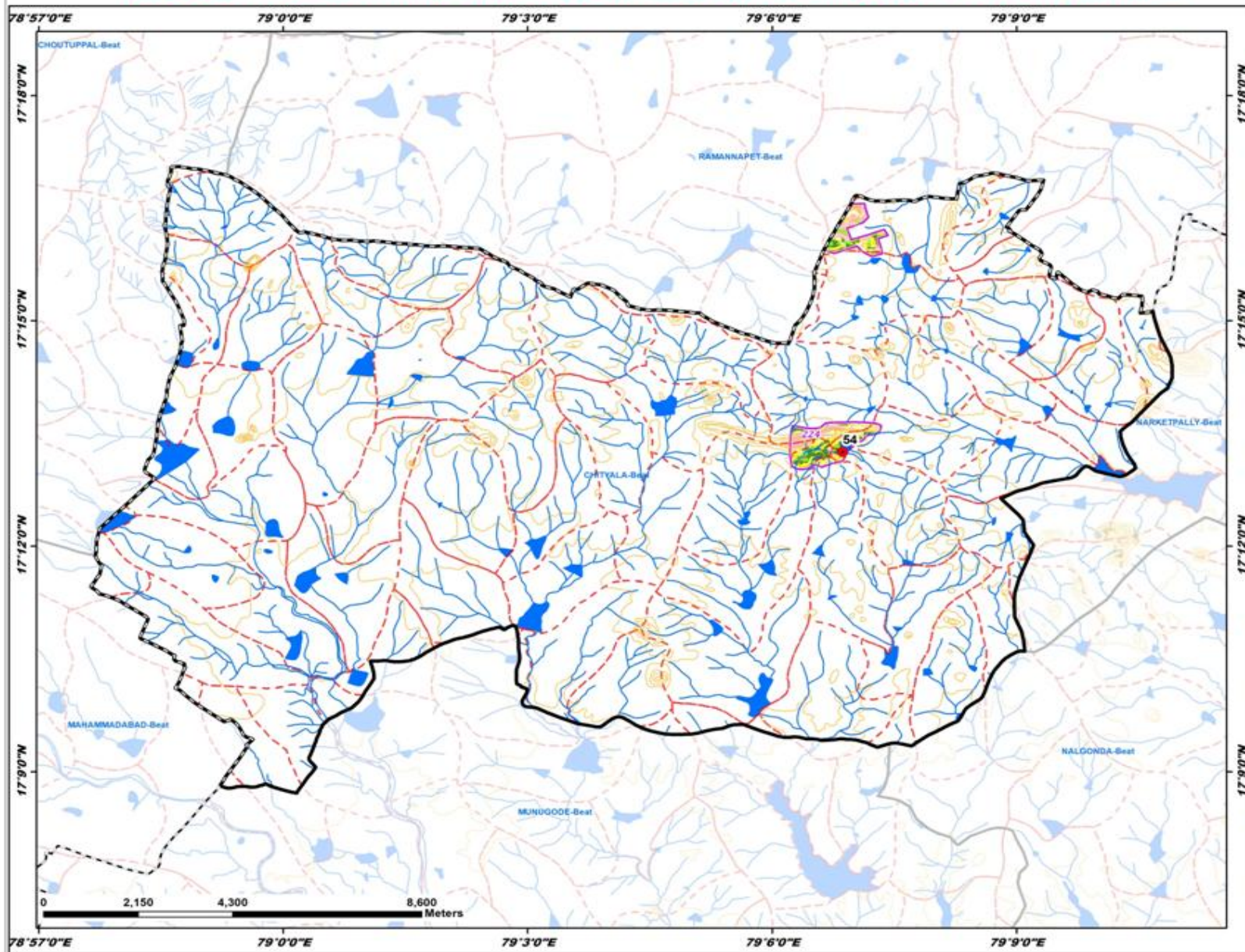
## LEGEND

- Proposed PTs
  - Existing CD/PTs
  - Contours
  - Streams
  - Watershed Boundary
  - Compartment Boundary
  - Beat Boundary
  - Division Boundary
- ### Suitability Index
- CC1s/SC1s - Highly Suitable
  - CC2s/SC2s - Moderately Suitable
  - CC3s/SC3s - Least Suitable
  - PTs - Highly Suitable
  - PTs - Moderately Suitable
  - PTs - Least Suitable
  - MPTs and SGPts - Suitable
  - Not Suitable
  - Water Body

# Map Showing Suitability Index for Construction of SMC Works of Chityala Beat



Division : Nalgonda  
Range : Nalgonda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
54	17.220899	79.114489	13.16	I

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

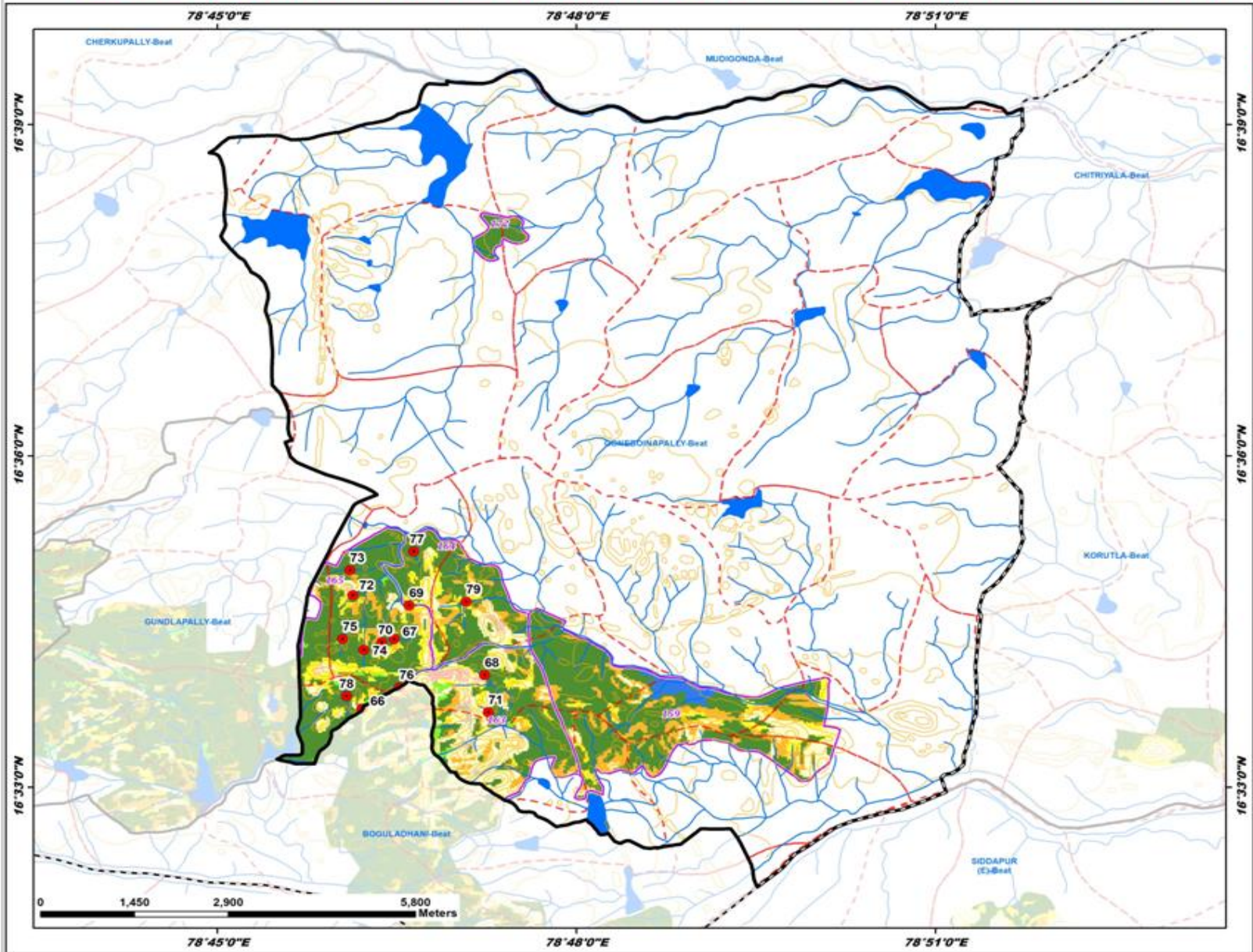
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Goneboinapally Beat



Division : Nalgonda  
Range : Nalgonda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
66	16.561889	78.770154	22.53	I
67	16.572383	78.774647	12.78	I
68	16.566940	78.787210	12.25	I
69	16.577447	78.776709	8.51	I
70	16.571876	78.772918	14.72	I
71	16.561340	78.787731	8.24	I
72	16.578998	78.768899	12.72	I
73	16.582760	78.768486	9.66	I
74	16.570731	78.770401	14.20	I
75	16.572420	78.767444	16.83	I
76	16.565105	78.775327	11.89	I
77	16.589631	78.777335	14.23	I
78	16.563773	78.768017	14.75	I
79	16.578027	78.784638	55.67	III

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

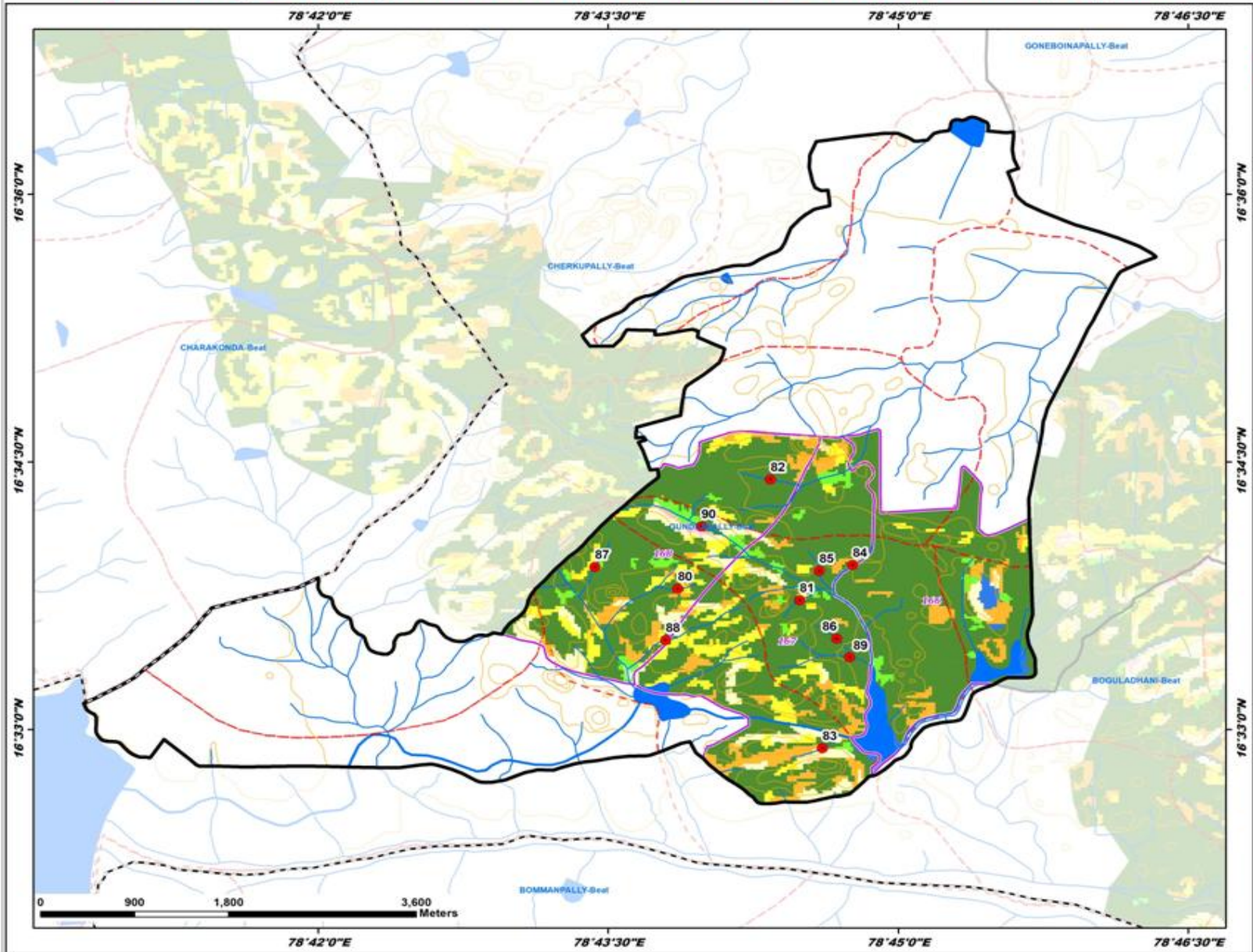
**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Suitability Index for Construction of SMC Works of Gundlapally Beat



Division : Nalgonda  
Range : Nalgonda



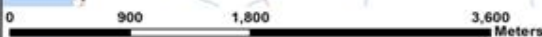
ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
80	16.563162	78.731005	5.94	I
81	16.562073	78.741515	8.02	I
82	16.573370	78.738991	13.44	I
83	16.548260	78.743482	9.50	I
84	16.565364	78.746087	19.74	I
85	16.564821	78.743197	13.06	I
86	16.558508	78.744713	8.06	I
87	16.565180	78.723848	18.21	II
88	16.508372	78.729939	36.57	II
89	16.506763	78.745830	29.22	II
90	16.568987	78.733025	61.03	III

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- Watershed Boundary
- Compartment Boundary
- Beat Boundary
- Division Boundary

**Suitability Index**

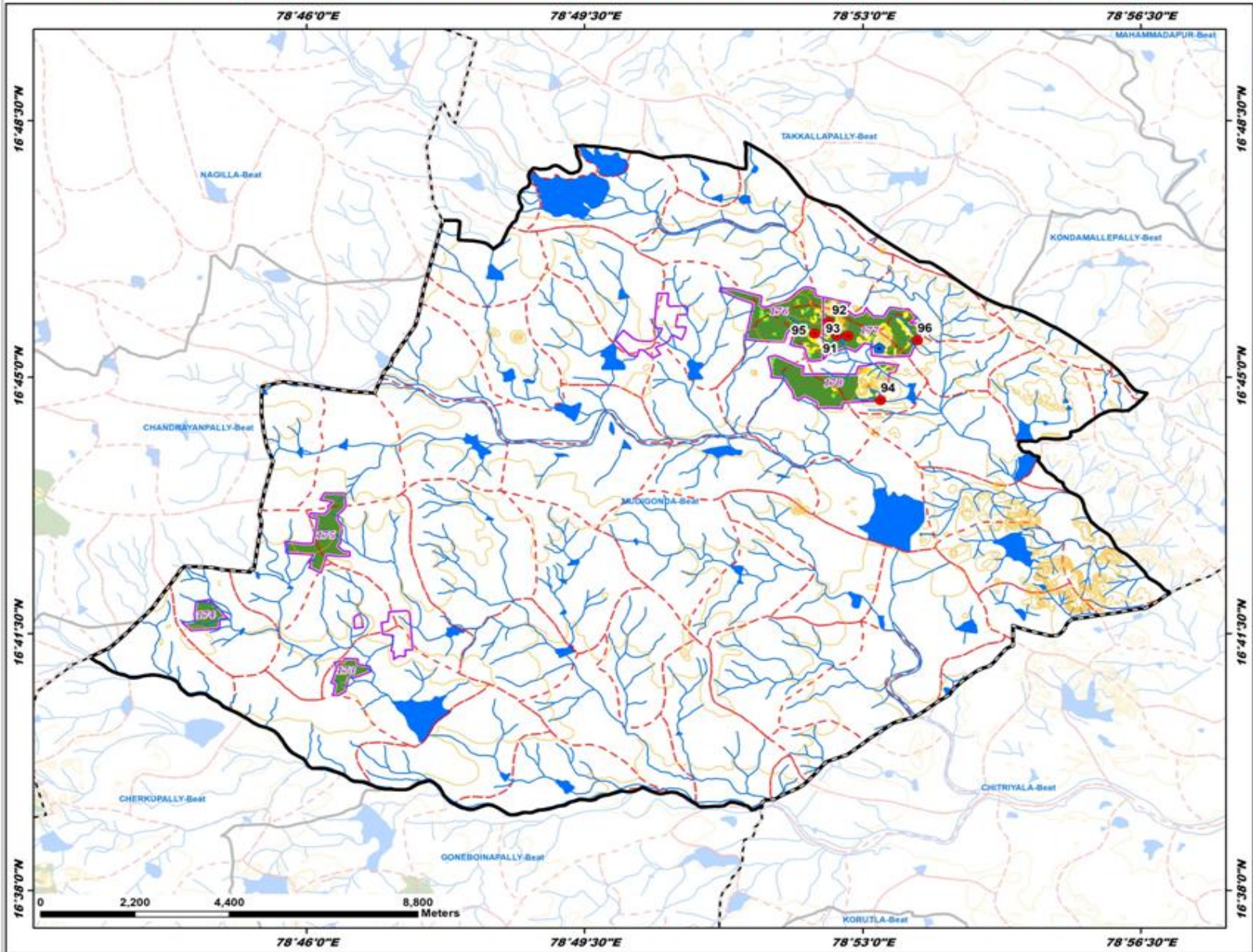
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



# Map Showing Suitability Index for Construction of SMC Works of Mudigonda Beat



Division : Nalgonda  
Range : Nalgonda



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
91	16.759504	78.878016	6.28	I
92	16.762578	78.876207	23.36	I
93	16.759410	78.880297	30.23	II
94	16.744779	78.887111	37.20	II
95	16.759941	78.873311	74.62	III
96	16.758367	78.894832	64.06	III

**LEGEND**

- Proposed PTs
- Existing CD/PTs
- Contours
- Streams
- - - Watershed Boundary
- - - Compartment Boundary
- ▭ Beat Boundary
- - - Division Boundary

**Suitability Index**

- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body