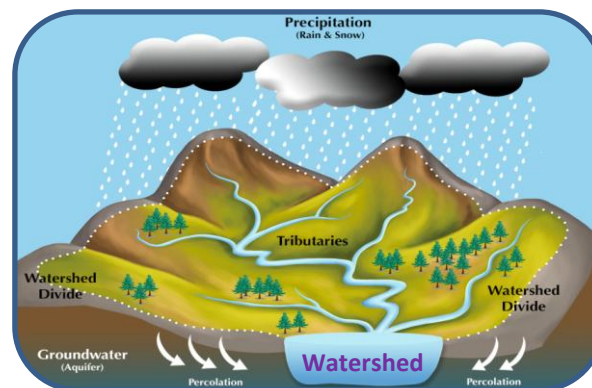


# Government of Telangana – Forest Department



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

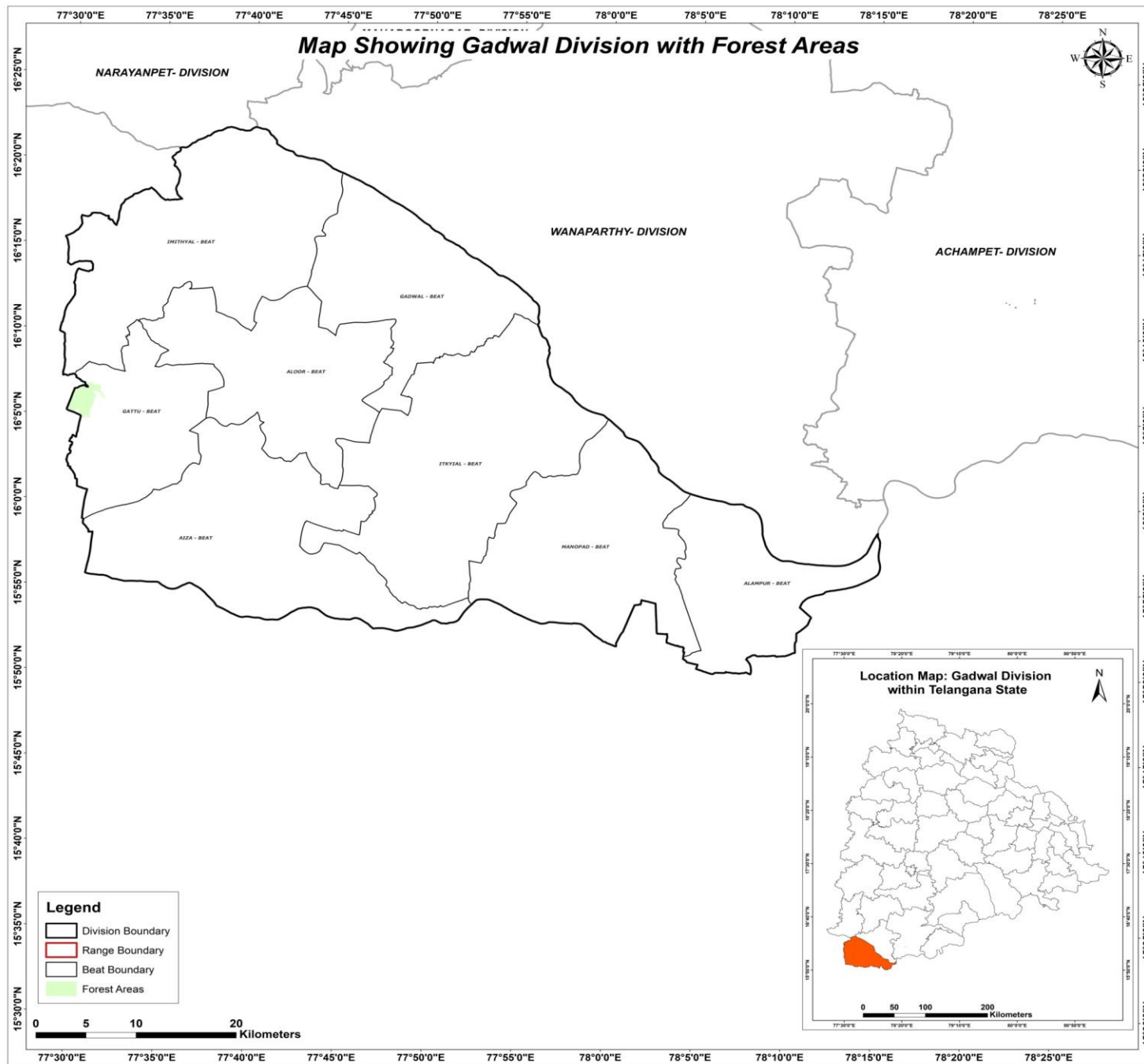


# **SITE SUITABILITY ANALYSIS FOR WATER HARVESTING STRUCTURES USING REMOTE SENSING & GIS**

**Circle: Jogulamba**  
**District: Wanaparthy & Jogulamba Gadwal**  
**Division: Wanaparthy & Gadwal**

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





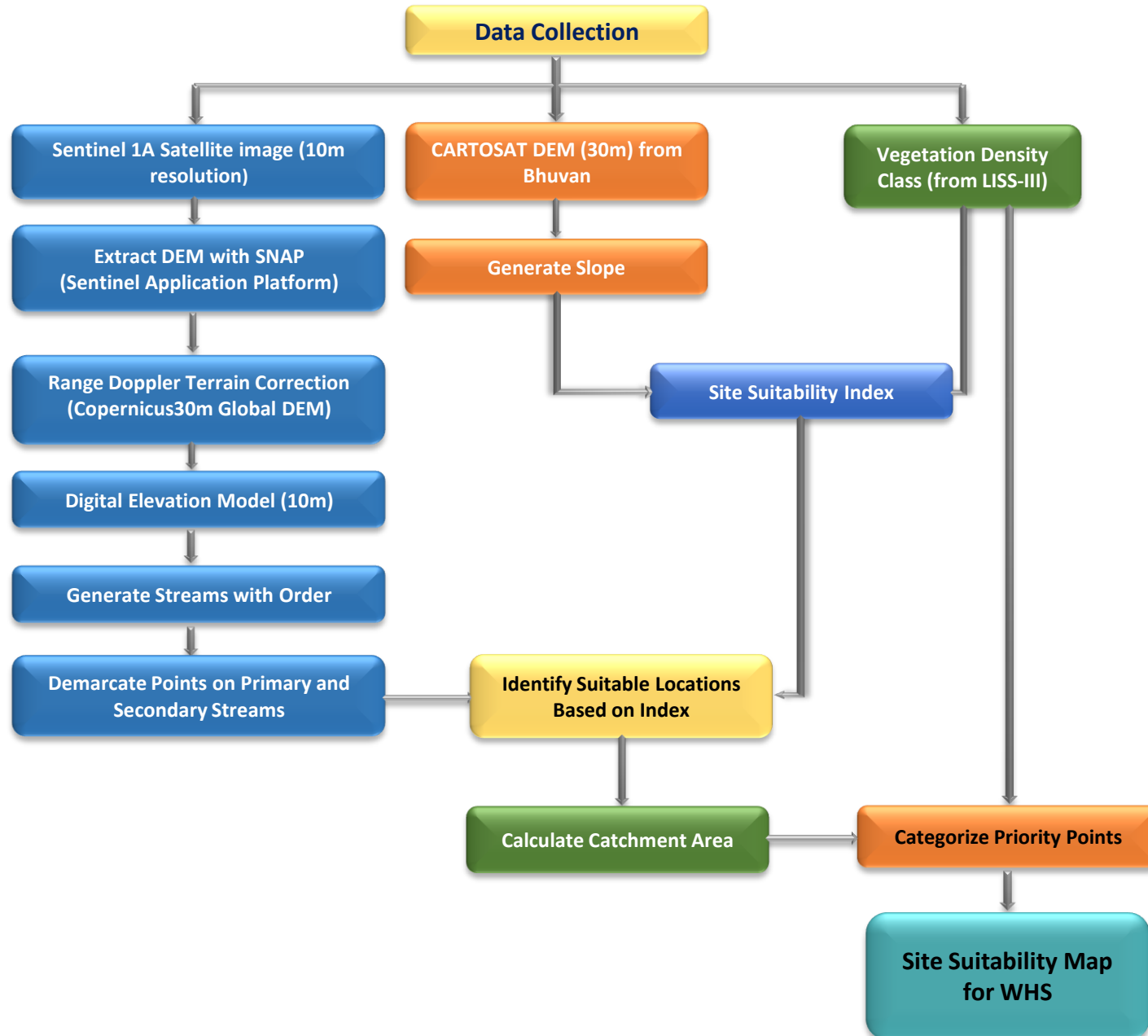
## METHODOLOGY

**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.



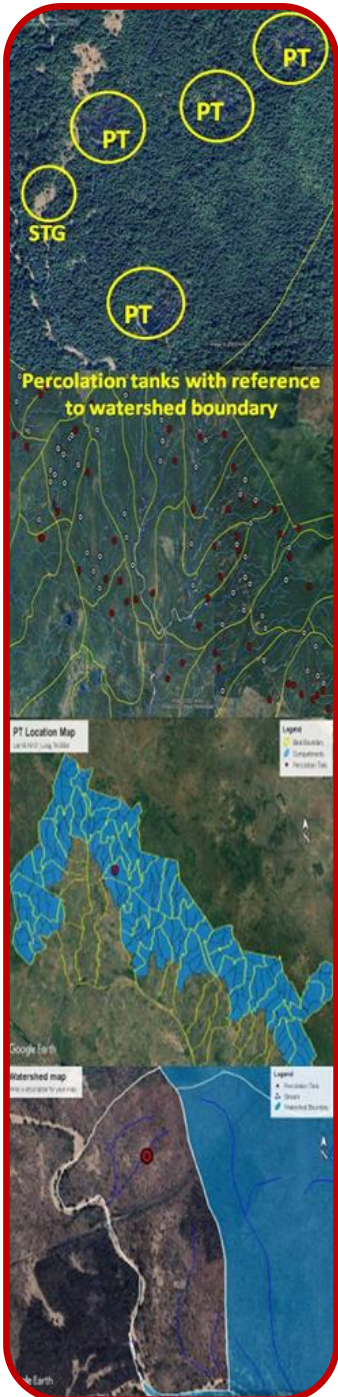
## Suitability criteria for Check-Dams and Percolation Tanks ( SITE SUITABILITY INDEX)

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

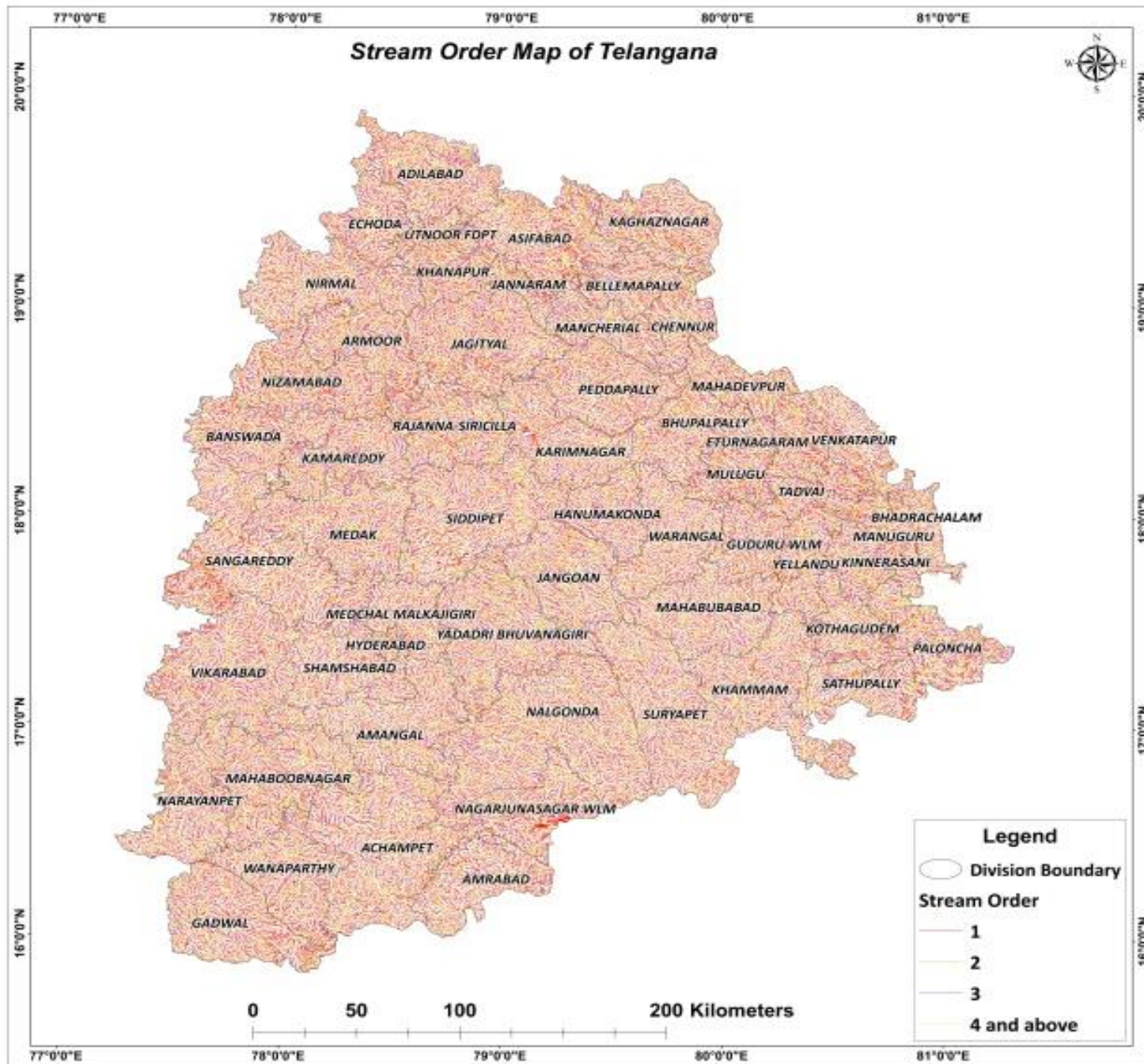
Rank	Slope classes (Degrees)	Density Classes
Highly Suitable	>5 and <= 10	Blanks
Moderately Suitable	>5 and <= 10	Scrub forest
Least suitable	>5 and <= 10	Open forest
	> 10 and < 25	Blanks & scrubs
MPTs and SGPs	>5 and <= 10	Dense Forest
	> 10 and < 25	Open and Dense forest

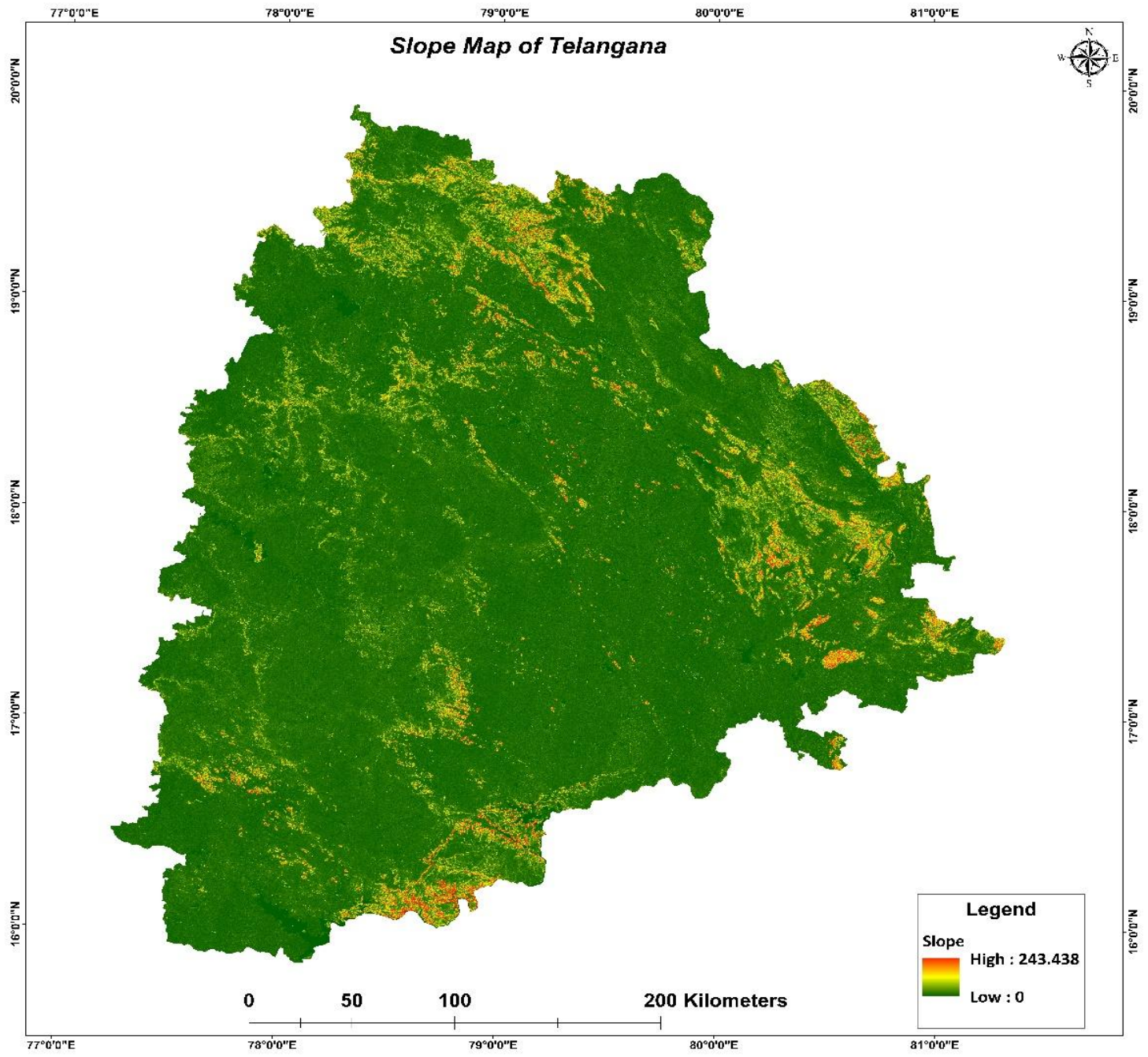




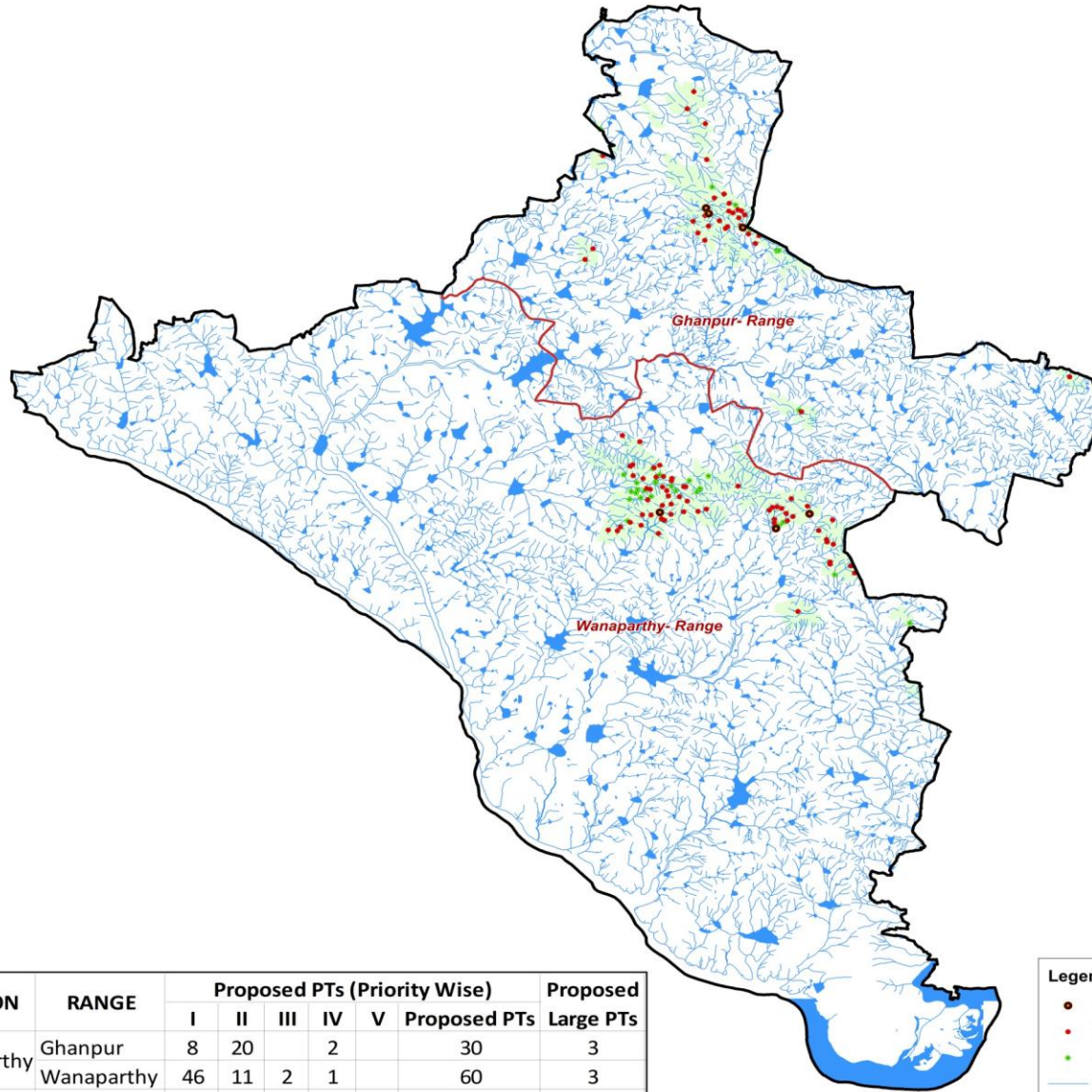
## PRIORITY CLASSES FOR PERCOLATION TANK

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



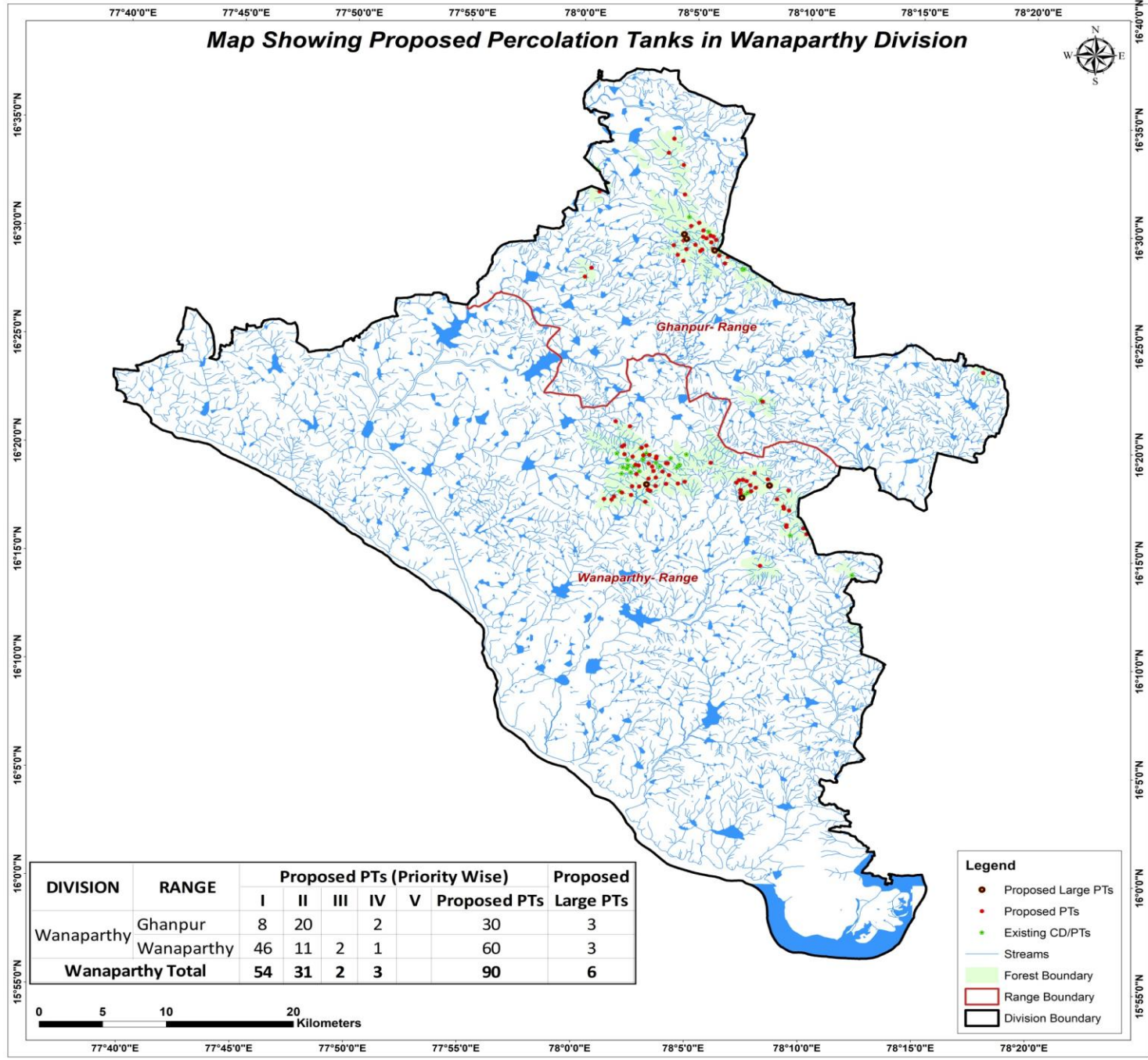


# Map Showing Proposed Percolation Tanks in Wanaparthy Division

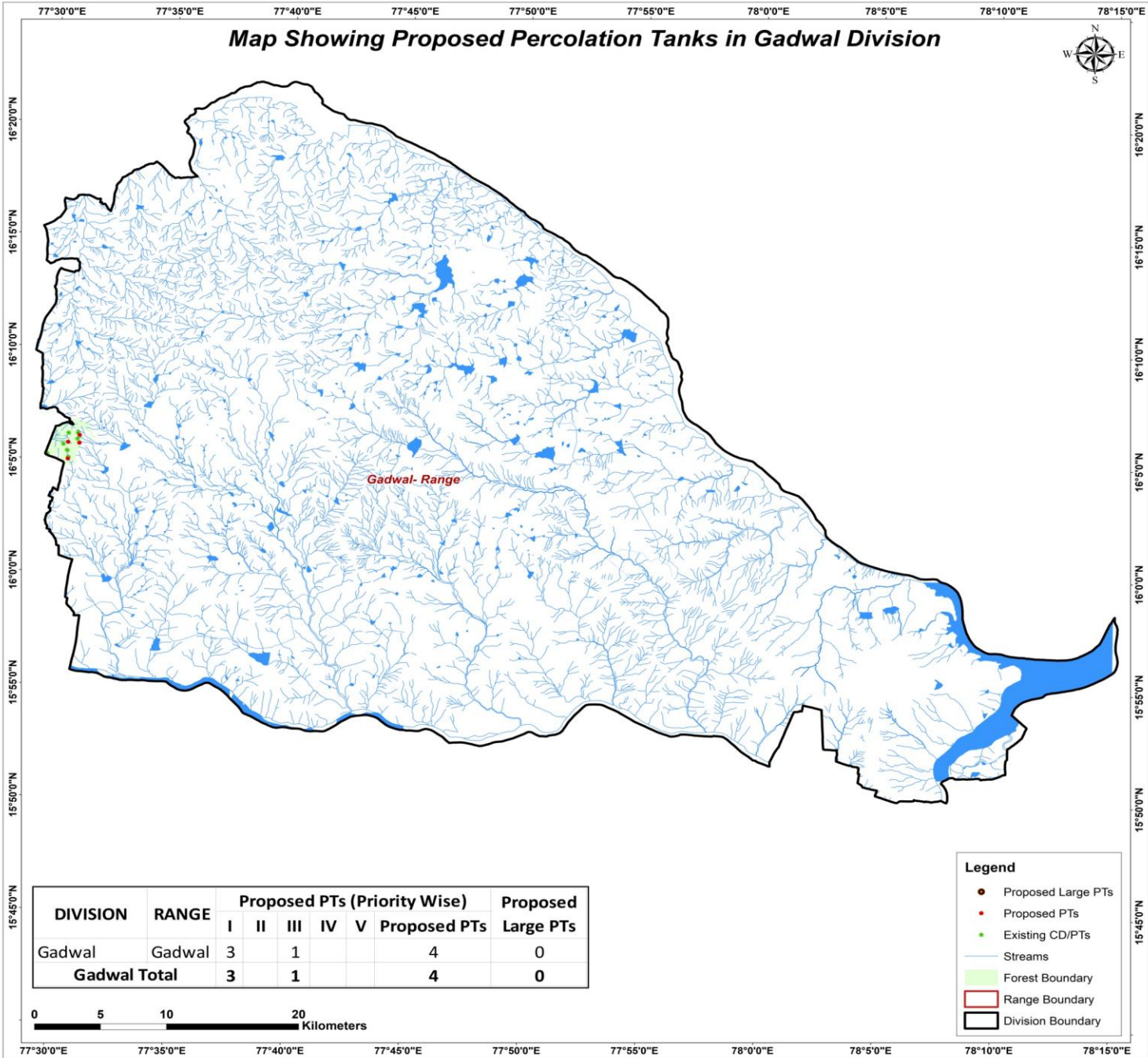


DIVISION	RANGE	Proposed PTs (Priority Wise)					Proposed PTs	Proposed Large PTs
		I	II	III	IV	V		
Wanaparthy	Ghanpur	8	20		2		30	3
	Wanaparthy	46	11	2	1		60	3
<b>Wanaparthy Total</b>		<b>54</b>	<b>31</b>	<b>2</b>	<b>3</b>		<b>90</b>	<b>6</b>

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



# Map Showing Proposed Percolation Tanks in Gadwal Division

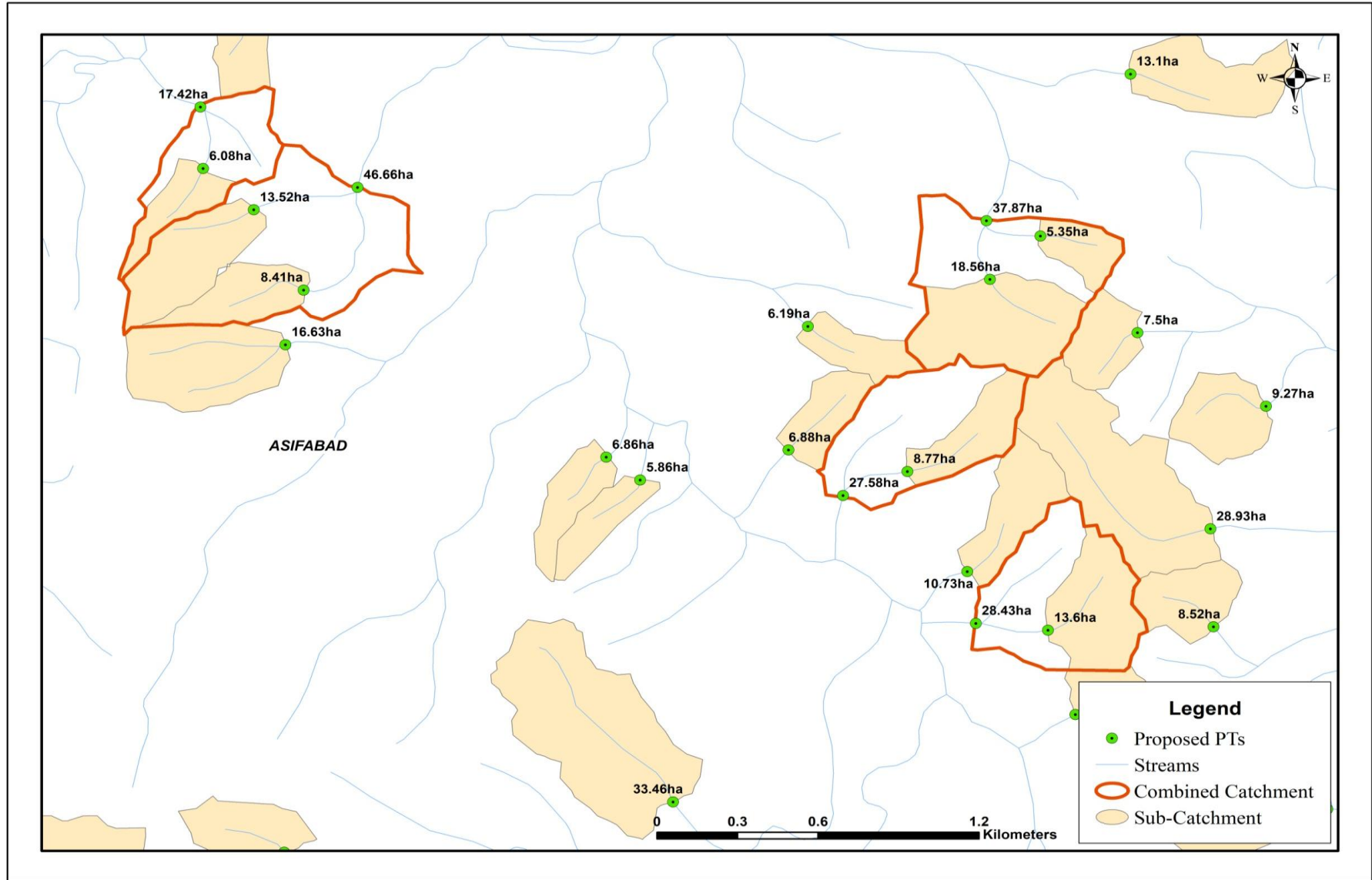


DIVISION	RANGE	Proposed PTs (Priority Wise)					Proposed Large PTs
		I	II	III	IV	V	
Gadwal	Gadwal	3	1				4
<b>Gadwal Total</b>		<b>3</b>	<b>1</b>				<b>4</b>

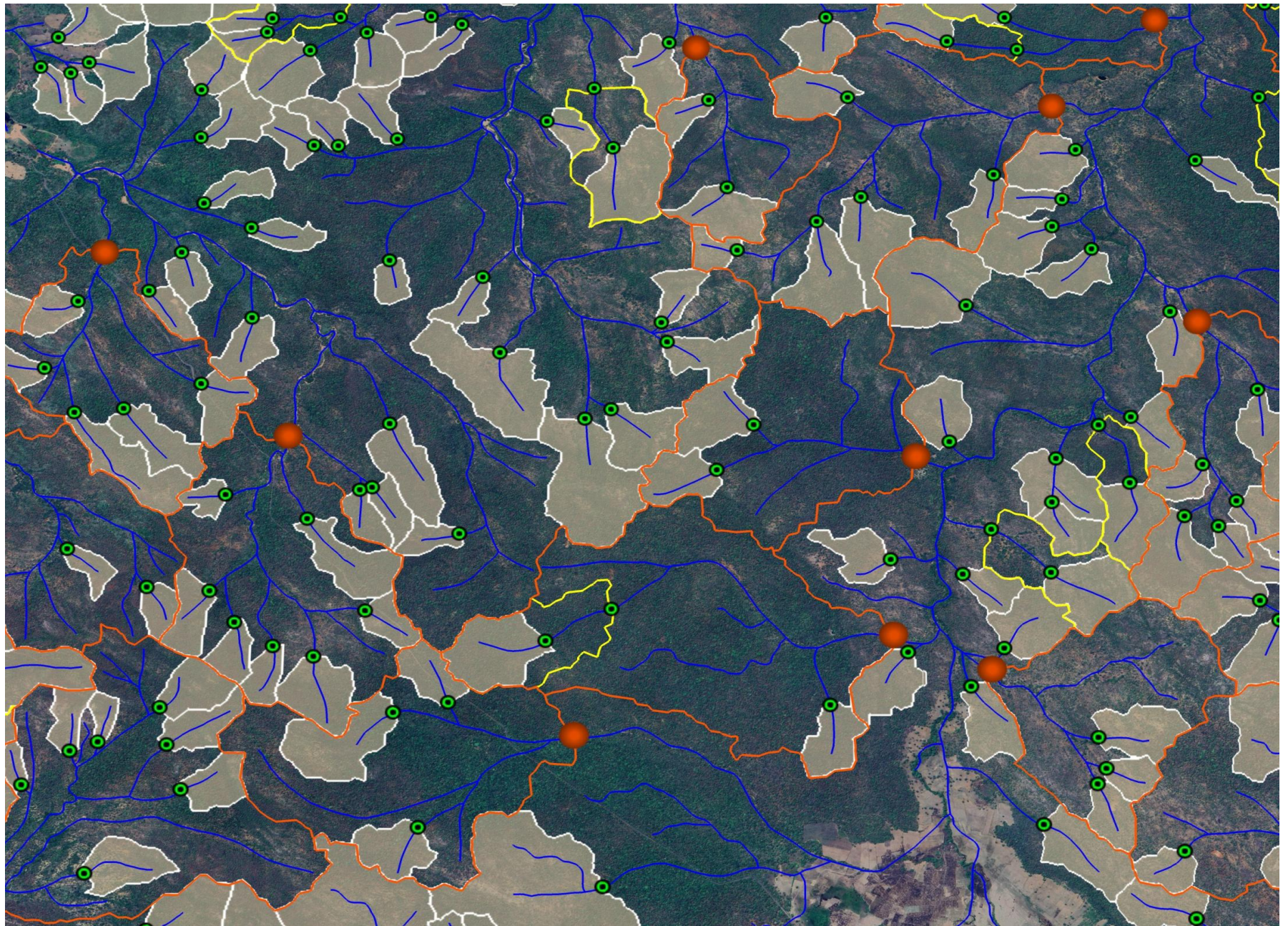


- Legend**
- Proposed Large PTs
  - Proposed PTs
  - Existing CD/PTs
  - Streams
  - Forest Boundary
  - Range Boundary
  - Division Boundary

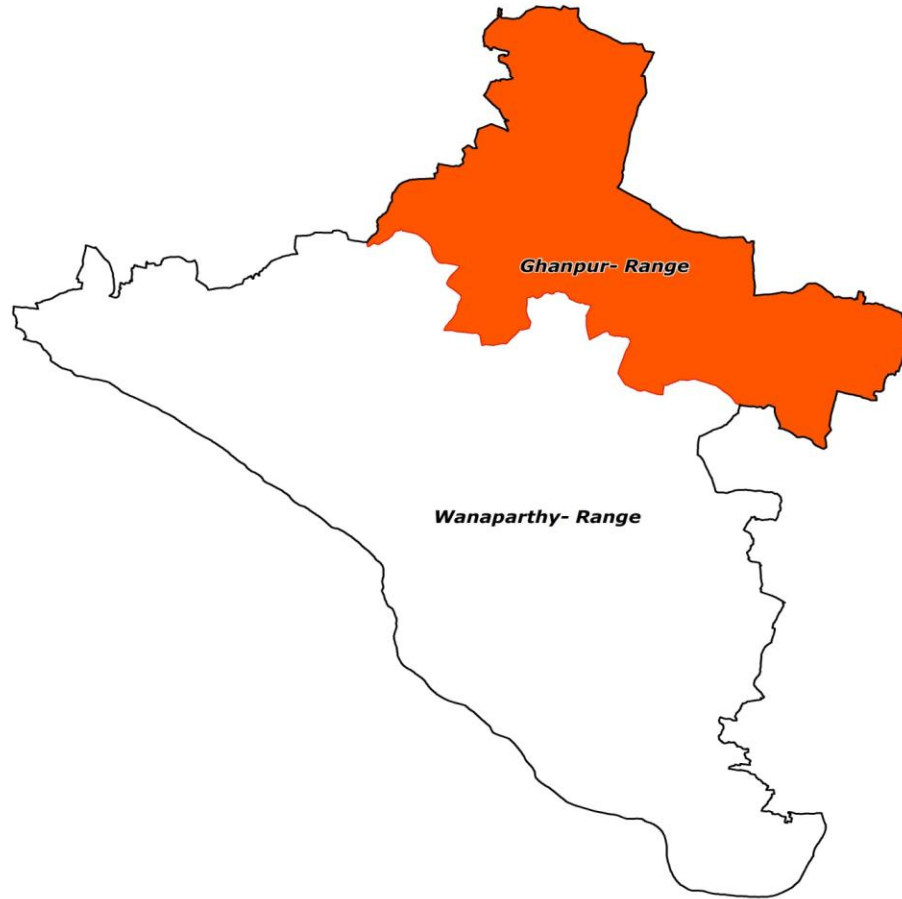
# CATCHMENT AREA



# Sample Catchment Map



# Map Showing Ghanpur Range in Wanaparthy Division



16°48'0"N  
16°40'0"N  
16°32'0"N  
16°24'0"N  
16°16'0"N  
16°08'0"N  
16°00'0"N  
15°52'0"N

77°36'0"E 77°44'0"E 77°52'0"E 78°0'0"E 78°8'0"E 78°16'0"E 78°24'0"E 78°32'0"E

16°40'0"N  
16°32'0"N  
16°24'0"N  
16°16'0"N  
16°08'0"N  
16°00'0"N  
15°52'0"N

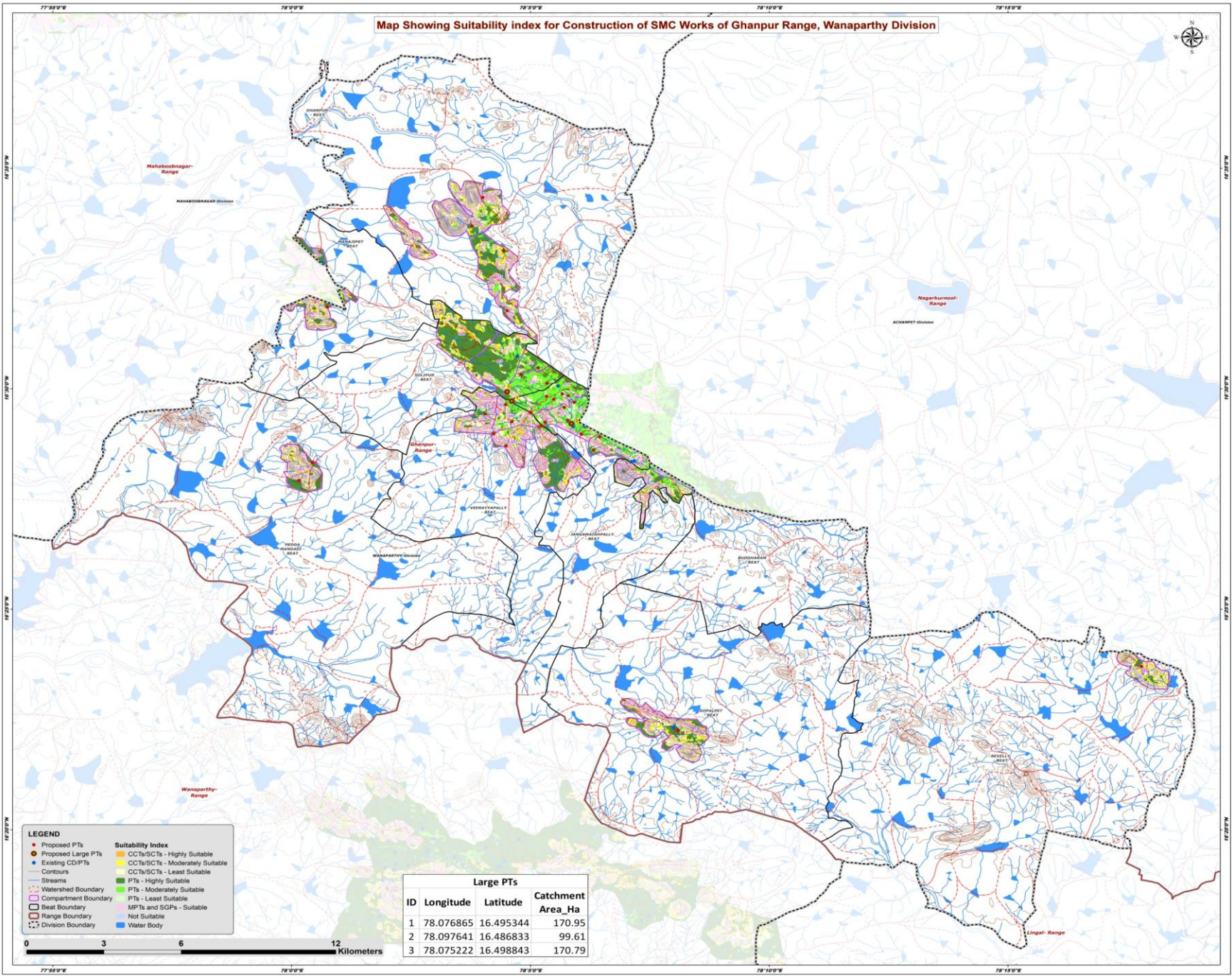


**Legend**

- Division Boundary
- Range Boundary

77°36'0"E 77°44'0"E 77°52'0"E 78°0'0"E 78°8'0"E 78°16'0"E 78°24'0"E 78°32'0"E

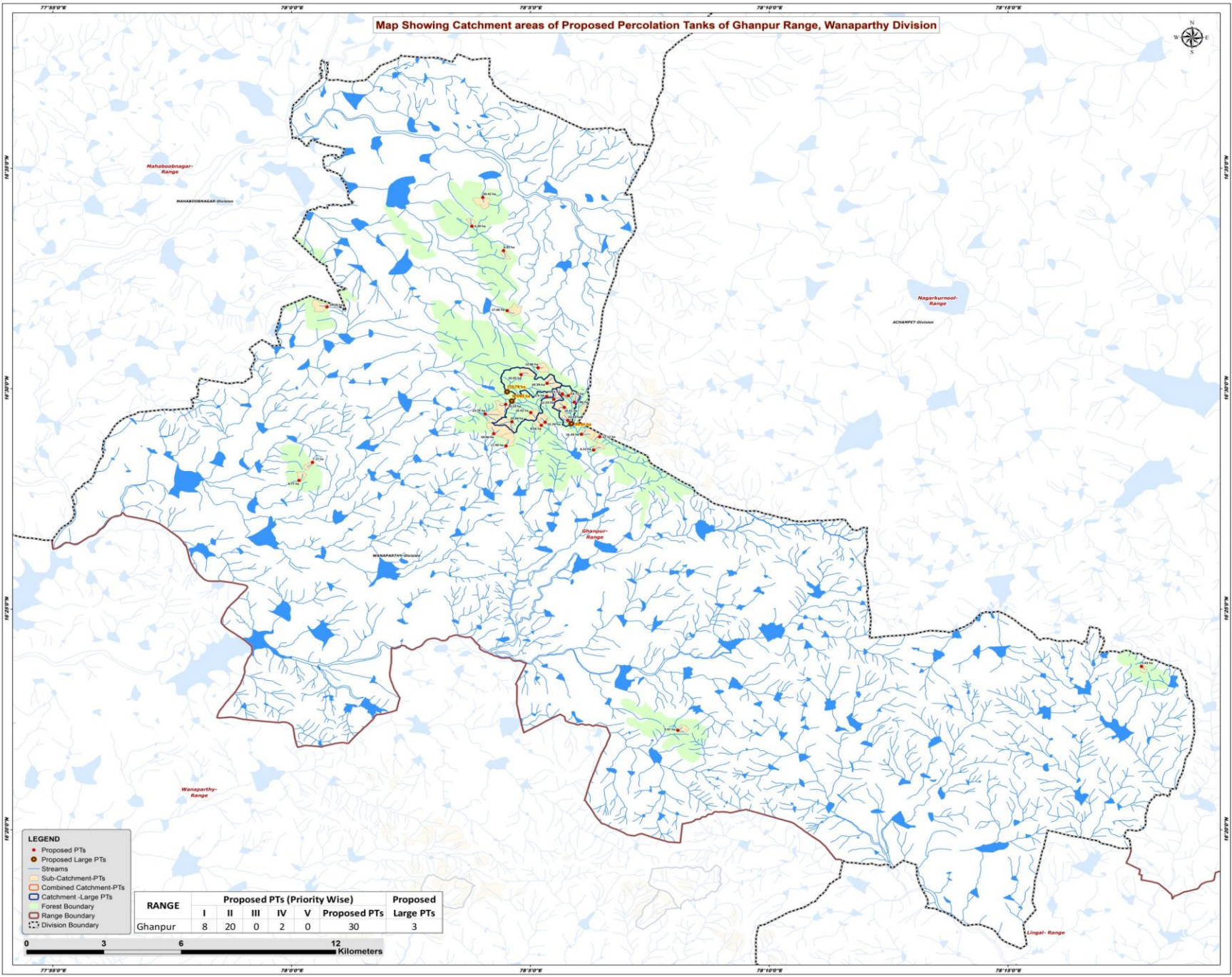
Map Showing Suitability index for Construction of SMC Works of Ghanpur Range, Wanaparthy Division



- 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
    - MP Ts and SGPs - Suitable
    - Not Suitable
    - Water Body

Large PTs			
ID	Longitude	Latitude	Catchment Area_Ha
1	78.076865	16.495344	170.95
2	78.097641	16.486833	99.61
3	78.075222	16.498843	170.79

Map Showing Catchment areas of Proposed Percolation Tanks of Ghanpur Range, Wanaparthy Division



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

RANGE	Proposed PTs (Priority Wise)					Proposed Large PTs
	I	II	III	IV	V	
Ghanpur	8	20	0	2	0	30
						3



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

S. No.	Beat	Proposed PT's
1	GHANPUR	4
2	GOPALPET	1
3	JANGAMAIAHPALLY	11
4	MANAJIPET	1
5	PEDDA MANDADI	2
6	REVELLY	1
7	SOLIPUR	3
8	VEERAYYAPALLY	7
	<b>Total</b>	<b>30</b>

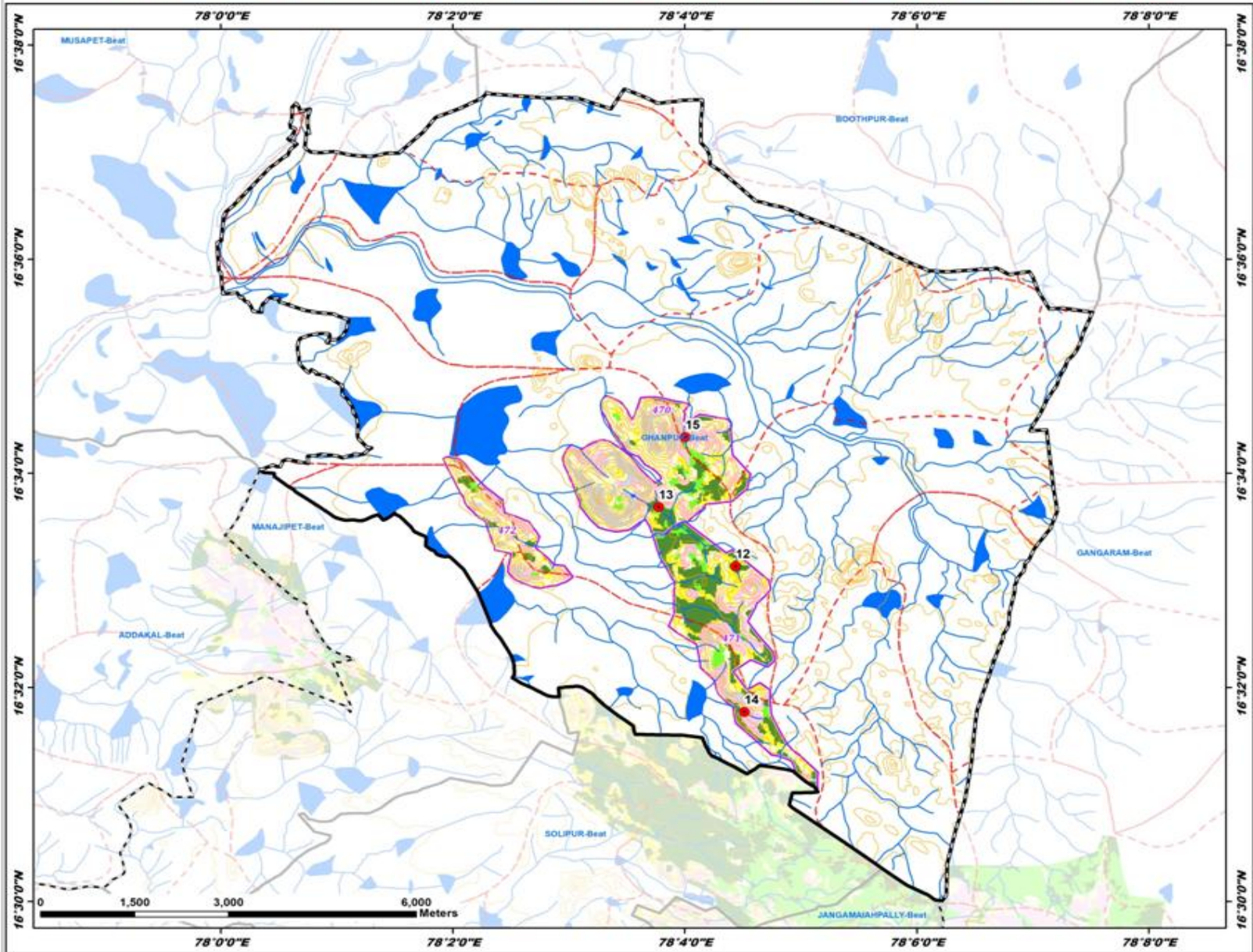
## List of Proposed PTs – Ghanpur Range

ID	Latitude	Longitude	Catchment Area_Ha	Priority	Beat
1	16.476852	78.105433	8.31	II	JANGAMAIAHPALLY
2	16.482799	78.101155	16.39	II	JANGAMAIAHPALLY
3	16.494917	78.098674	7.46	II	JANGAMAIAHPALLY
4	16.496036	78.091526	12.55	II	JANGAMAIAHPALLY
5	16.497093	78.089032	5.60	II	JANGAMAIAHPALLY
6	16.481853	78.107570	12.12	II	JANGAMAIAHPALLY
7	16.488034	78.096443	10.03	II	JANGAMAIAHPALLY
8	16.492965	78.095170	16.41	II	JANGAMAIAHPALLY
9	16.487339	78.088488	12.26	II	JANGAMAIAHPALLY
10	16.497385	78.096598	19.72	IV	JANGAMAIAHPALLY
11	16.498072	78.094504	5.25	IV	JANGAMAIAHPALLY
12	16.552199	78.073969	6.83	I	GHANPUR
13	16.561422	78.062933	6.39	II	GHANPUR
14	16.529521	78.075241	17.66	II	GHANPUR
15	16.572322	78.066737	20.42	II	GHANPUR
16	16.530962	78.012382	19.28	I	MANAJIPET
17	16.505320	78.080119	16.65	I	SOLIPUR
18	16.507942	78.086029	12.86	II	SOLIPUR
19	16.502067	78.089195	20.39	II	SOLIPUR
20	16.370913	78.134807	9.97	I	GOPALPET
21	16.395073	78.296676	5.43	I	REVELLY
22	16.465343	78.002618	9.77	I	PEDDA MANDADI
23	16.472178	78.007287	7.17	I	PEDDA MANDADI
24	16.490439	78.067580	23.78	I	VEERAYYAPALLY
25	16.486159	78.087183	8.56	II	VEERAYYAPALLY
26	16.487526	78.076935	20.84	II	VEERAYYAPALLY
27	16.483030	78.070580	32.46	II	VEERAYYAPALLY
28	16.494074	78.074736	20.23	II	VEERAYYAPALLY
29	16.478394	78.074825	17.49	II	VEERAYYAPALLY
30	16.490990	78.083468	14.42	II	VEERAYYAPALLY

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



Division : Wanaparthy  
Range : Ghanpur



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
12	16.552199	78.073969	6.83	I
13	16.563422	78.062933	6.39	II
14	16.529521	78.075241	17.66	II
15	16.572322	78.066737	20.42	II

**LEGEND**

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

**Suitability Index**

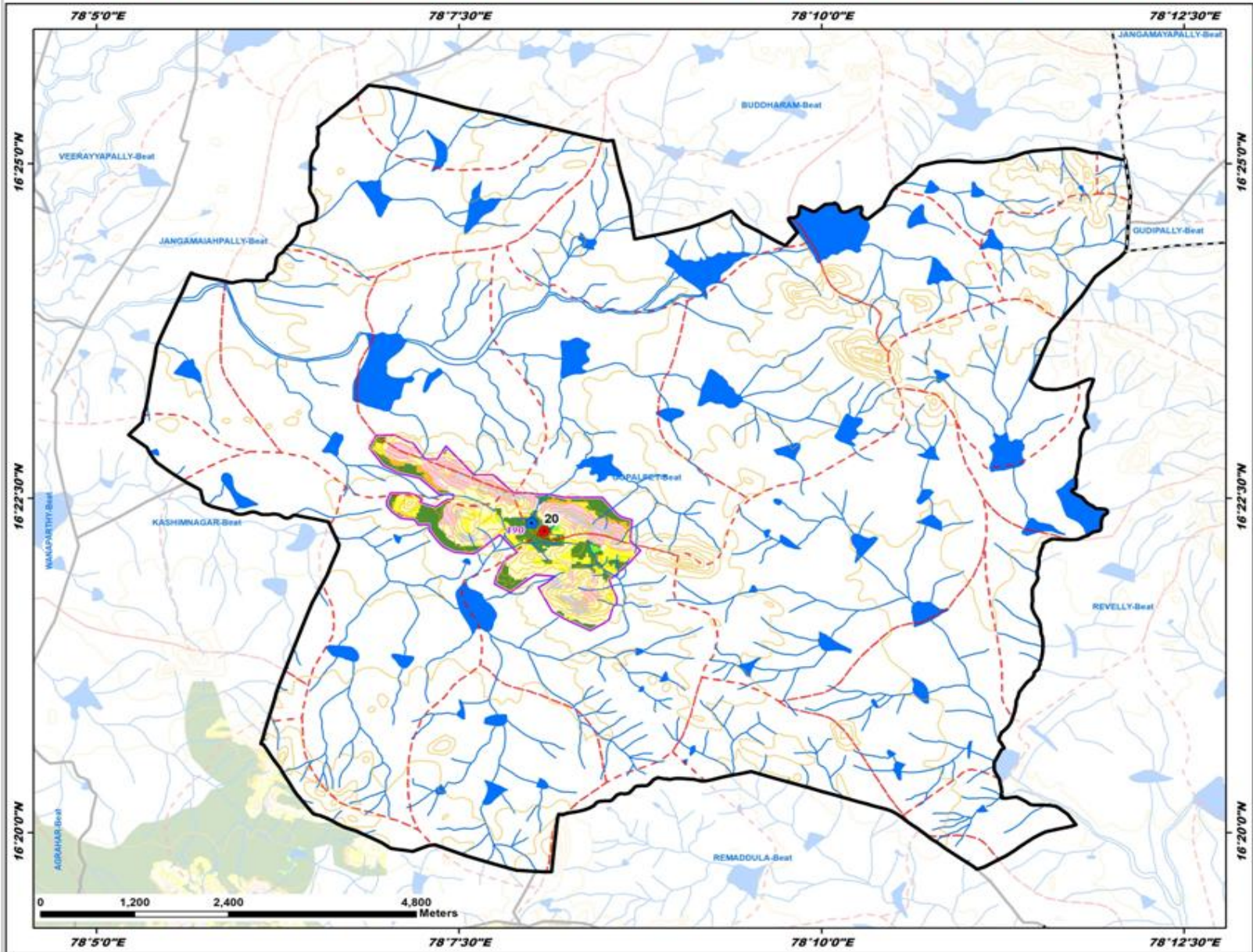
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



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



Division : Wanaparthy  
Range : Ghanpur



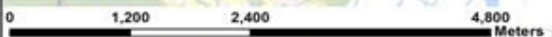
ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
20	16.370913	78.134807	9.97	I

**LEGEND**

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

**Suitability Index**

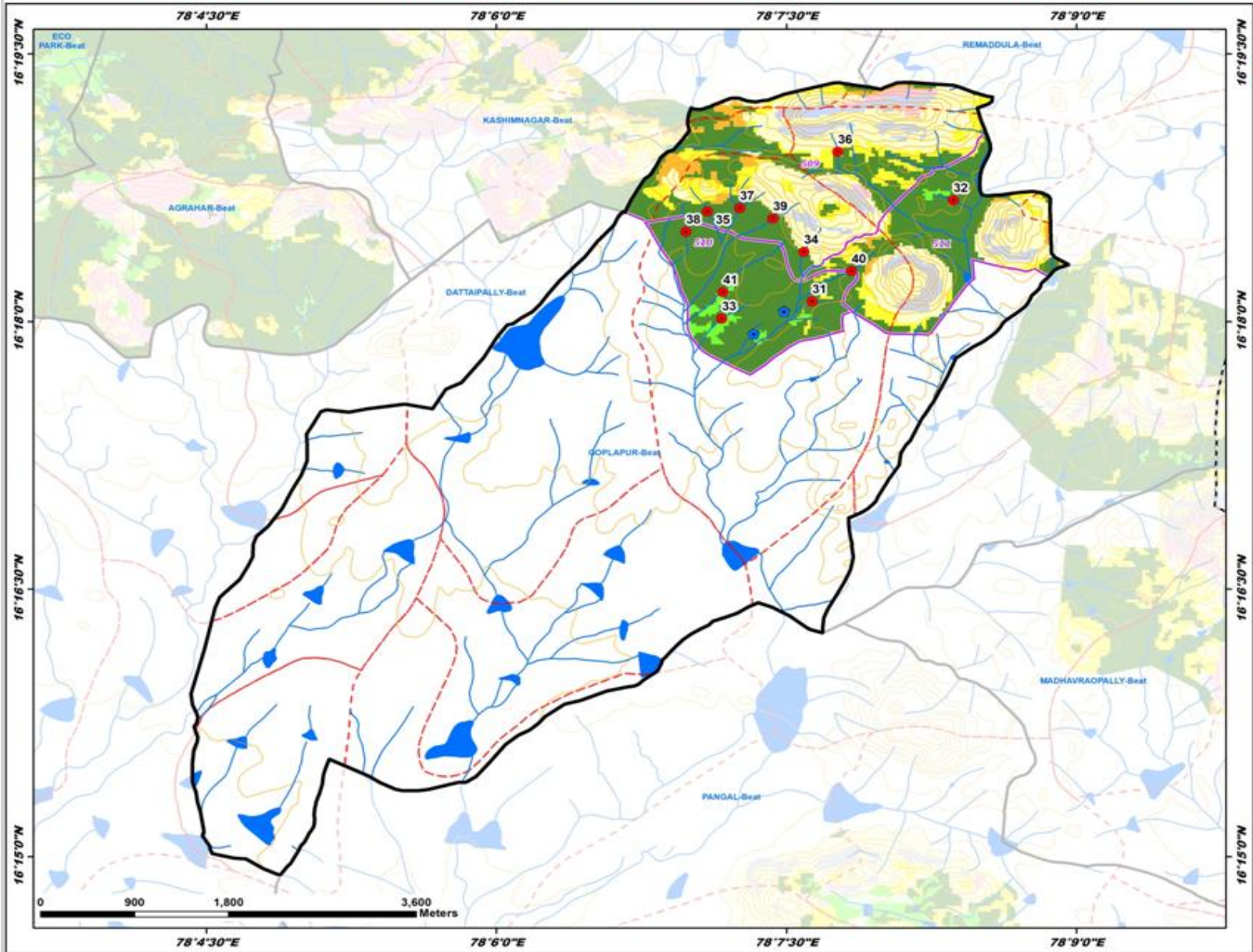
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



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



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
31	16.301887	78.127237	7.19	I
32	16.311331	78.139406	12.28	I
33	16.300296	78.119434	8.97	I
34	16.306530	78.126516	5.11	I
35	16.310283	78.118200	8.64	I
36	16.315864	78.129435	5.13	I
37	16.310600	78.120994	14.25	I
38	16.308396	78.116357	9.12	I
39	16.309629	78.123848	7.42	I
40	16.304715	78.130637	25.28	II
41	16.302751	78.119553	25.81	III

**LEGEND**

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

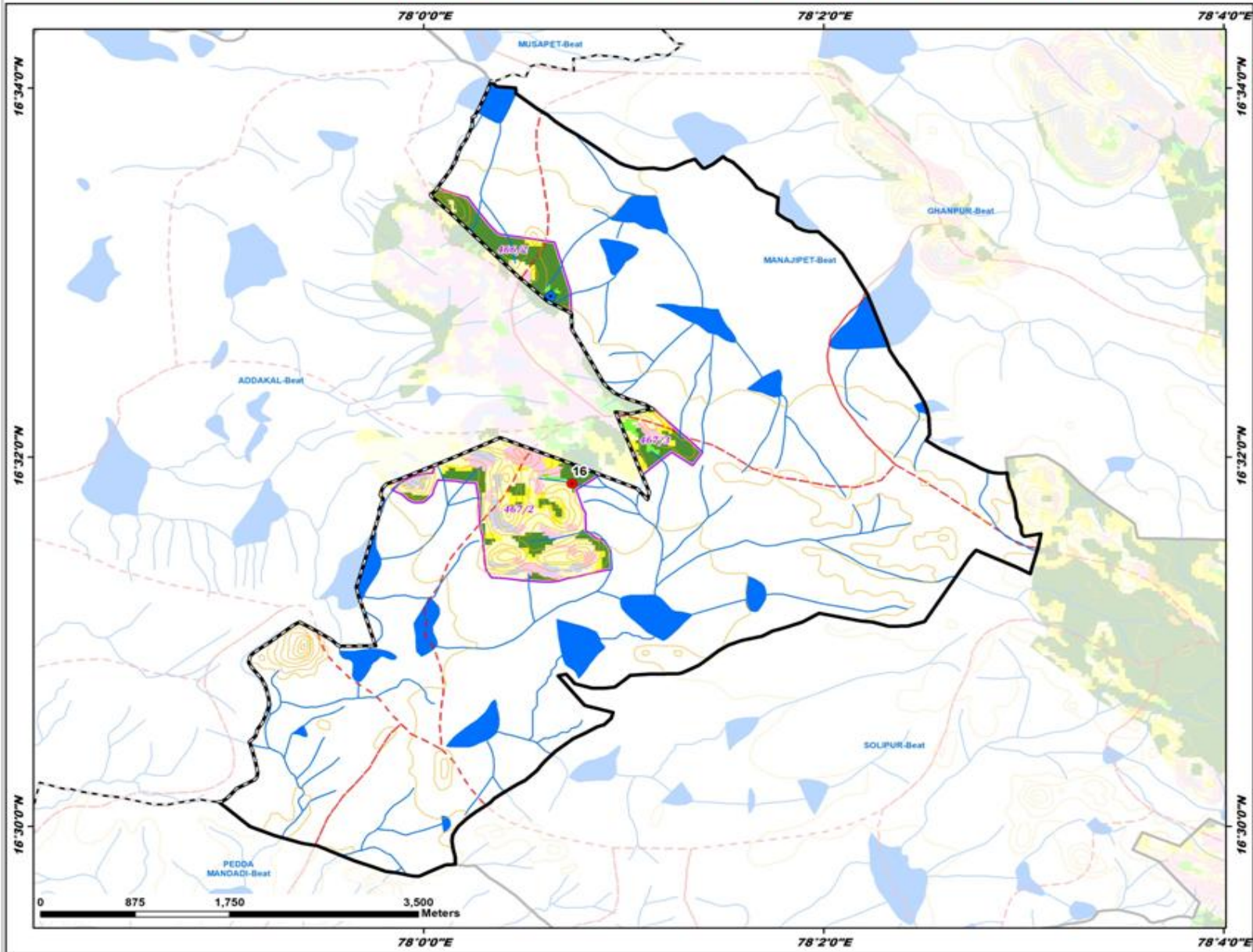
**Suitability Index**

- 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 Manajipet Beat



Division : Wanaparthy  
Range : Ghanpur



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
16	16.530962	78.012382	19.28	I

**LEGEND**

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

**Suitability Index**

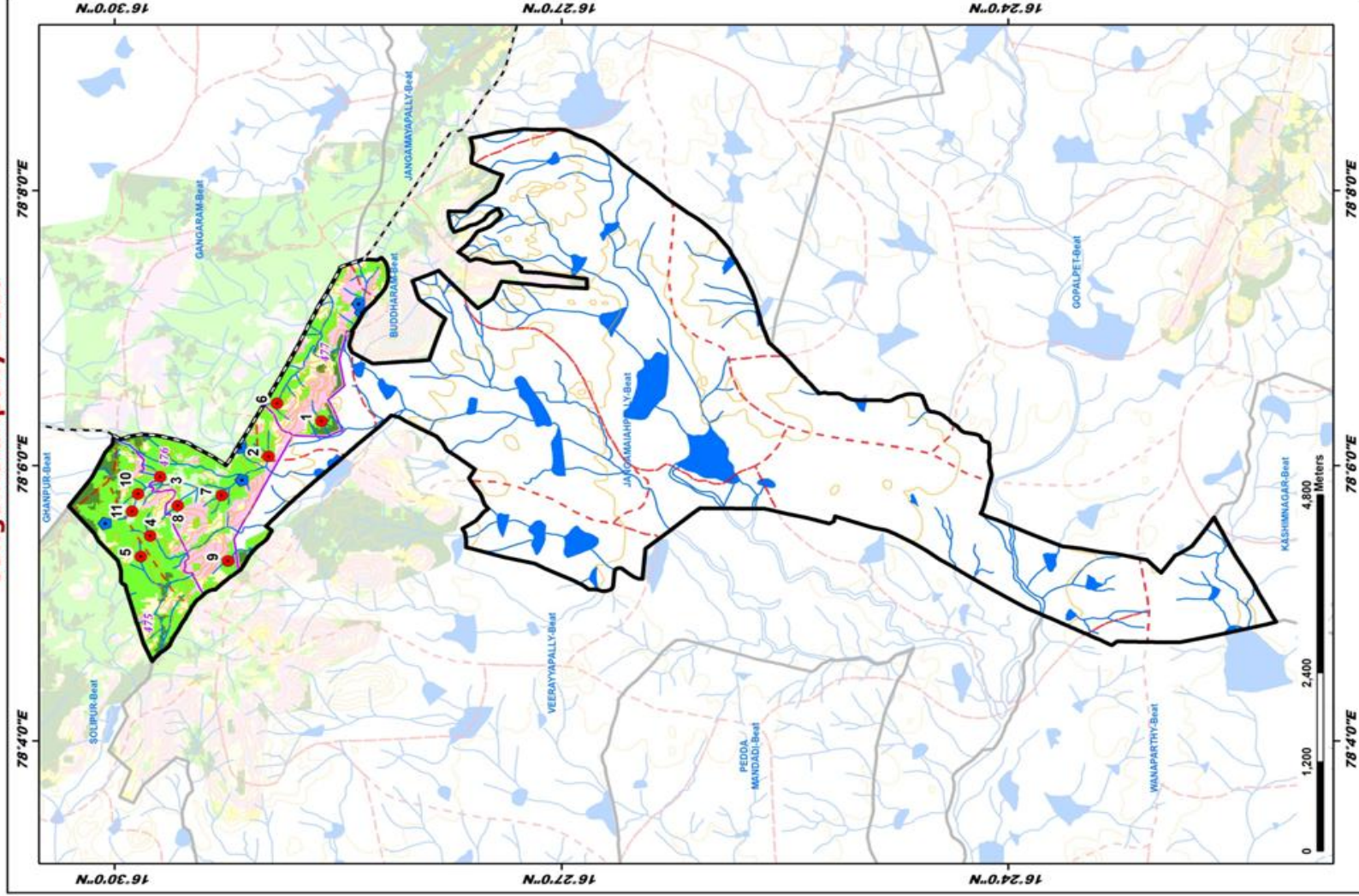
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



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



Division : Wanaparthy  
Range : Ghanpur



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
1	16.476532	78.105433	8.31	II
2	16.482799	78.101155	16.39	II
3	16.494917	78.098674	7.46	II
4	16.496036	78.091526	12.55	II
5	16.497093	78.090032	5.60	II
6	16.481853	78.107570	12.12	II
7	16.488034	78.096443	10.03	II
8	16.492965	78.095170	16.41	II
9	16.487339	78.084688	12.26	II
10	16.497385	78.096598	19.72	IV
11	16.498072	78.094504	5.25	IV

## LEGEND

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

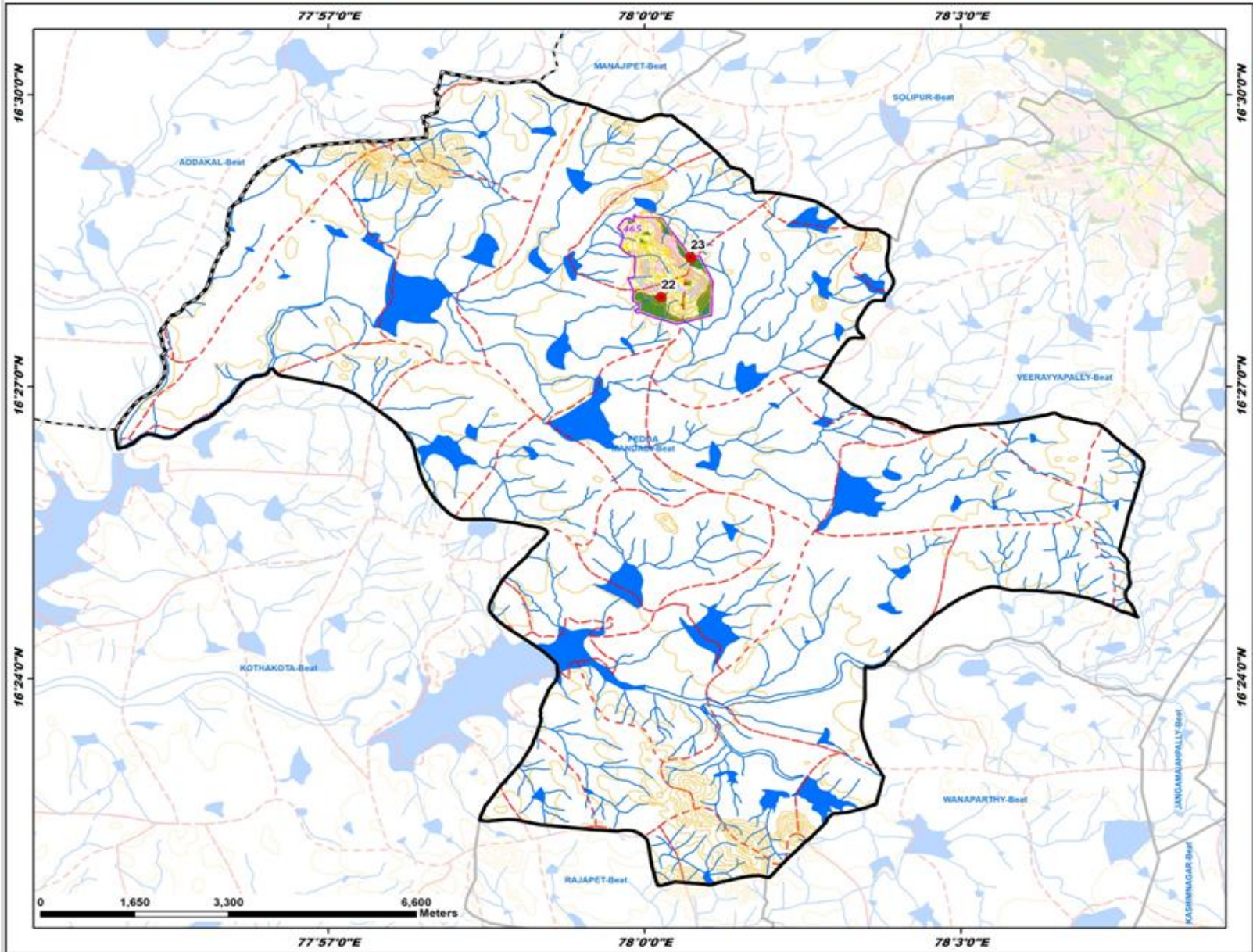
## Suitability Index

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

# Map Showing Suitability Index for Construction of SMC Works of Pedda Mandadi Beat



Division : Wanaparthy  
Range : Ghanpur



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
22	16.465343	78.002618	9.77	I
23	16.472178	78.007287	7.17	I

**LEGEND**

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

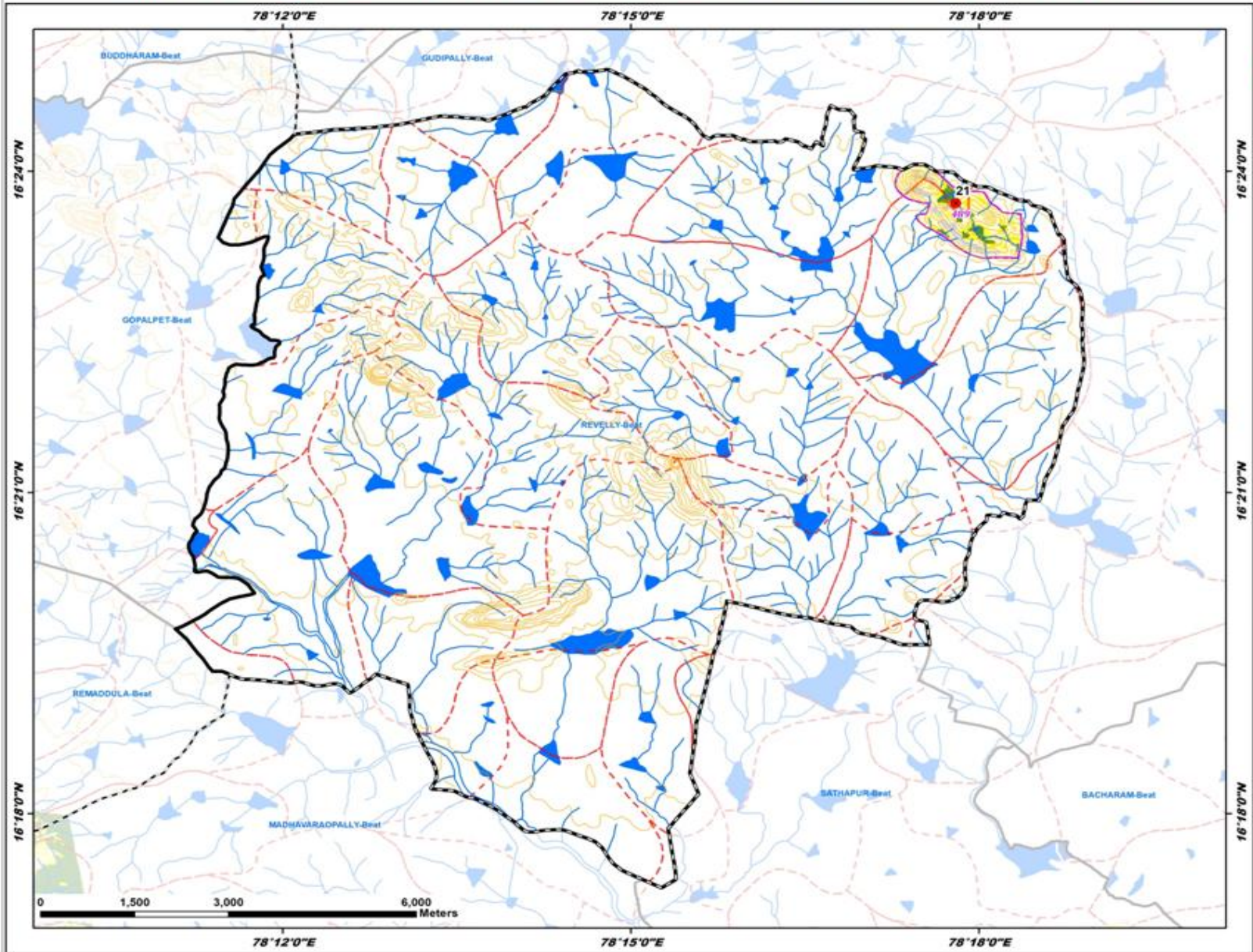
**Suitability Index**

- 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 Revelly Beat



Division : Wanaparthy  
Range : Ghanpur



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
21	16.395073	78.296676	5.43	I

**LEGEND**

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

**Suitability Index**

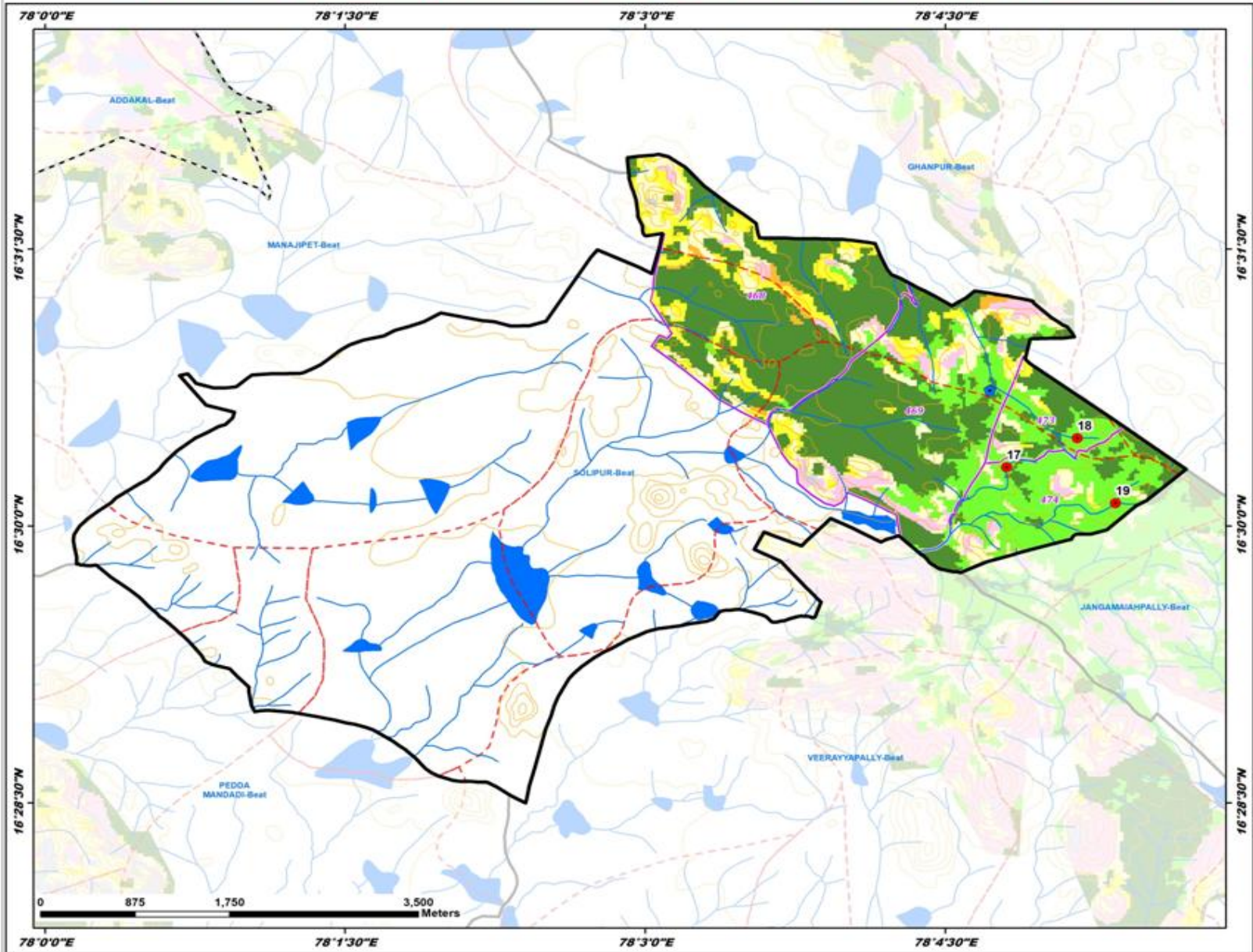
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



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



Division : Wanaparthy  
Range : Ghanpur



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
17	16.505320	78.080119	16.65	I
18	16.507942	78.086029	12.86	II
19	16.502067	78.089195	20.39	III

**LEGEND**

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

**Suitability Index**

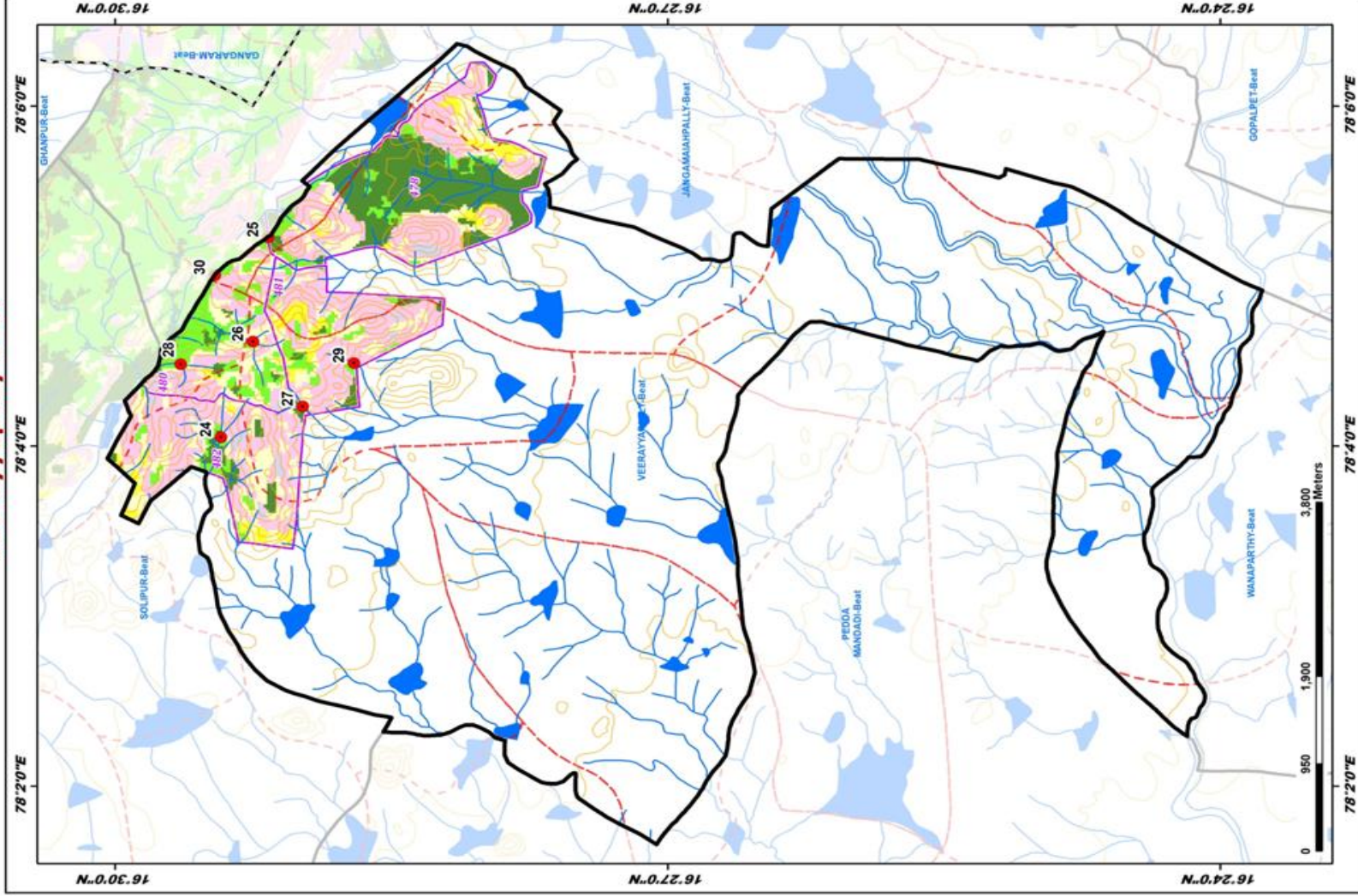
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



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



Division : Wanaparthy  
Range : Ghanapur

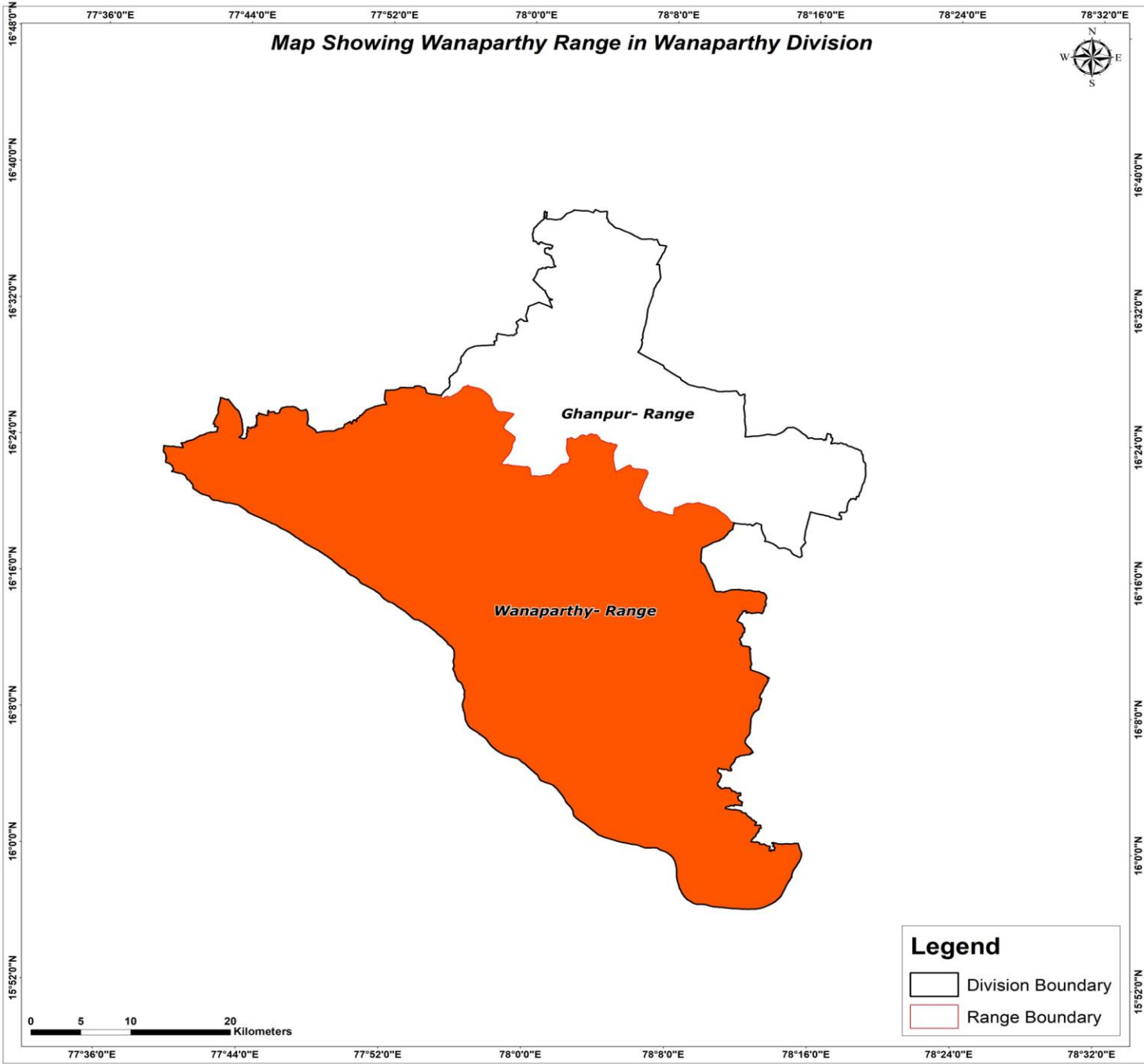


ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
24	16.490439	78.067580	23.78	I
25	16.486159	78.067183	8.56	II
26	16.487516	78.076935	20.84	II
27	16.483030	78.070580	32.46	II
28	16.494074	78.074736	20.23	II
29	16.478394	78.074025	17.49	II
30	16.490590	78.083468	14.42	II

## 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

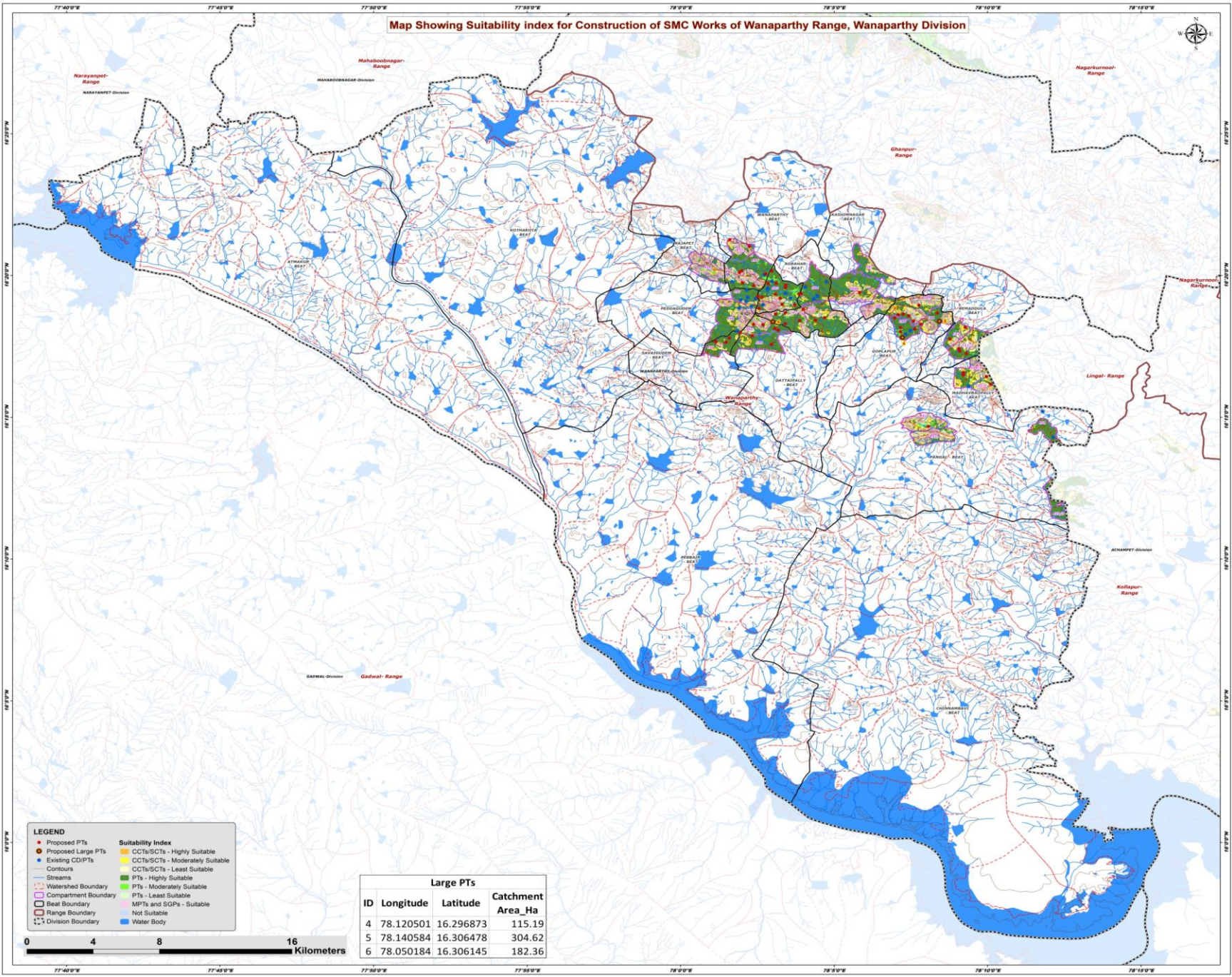
# Map Showing Wanaparthy Range in Wanaparthy Division



**Legend**

-  Division Boundary
-  Range Boundary

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

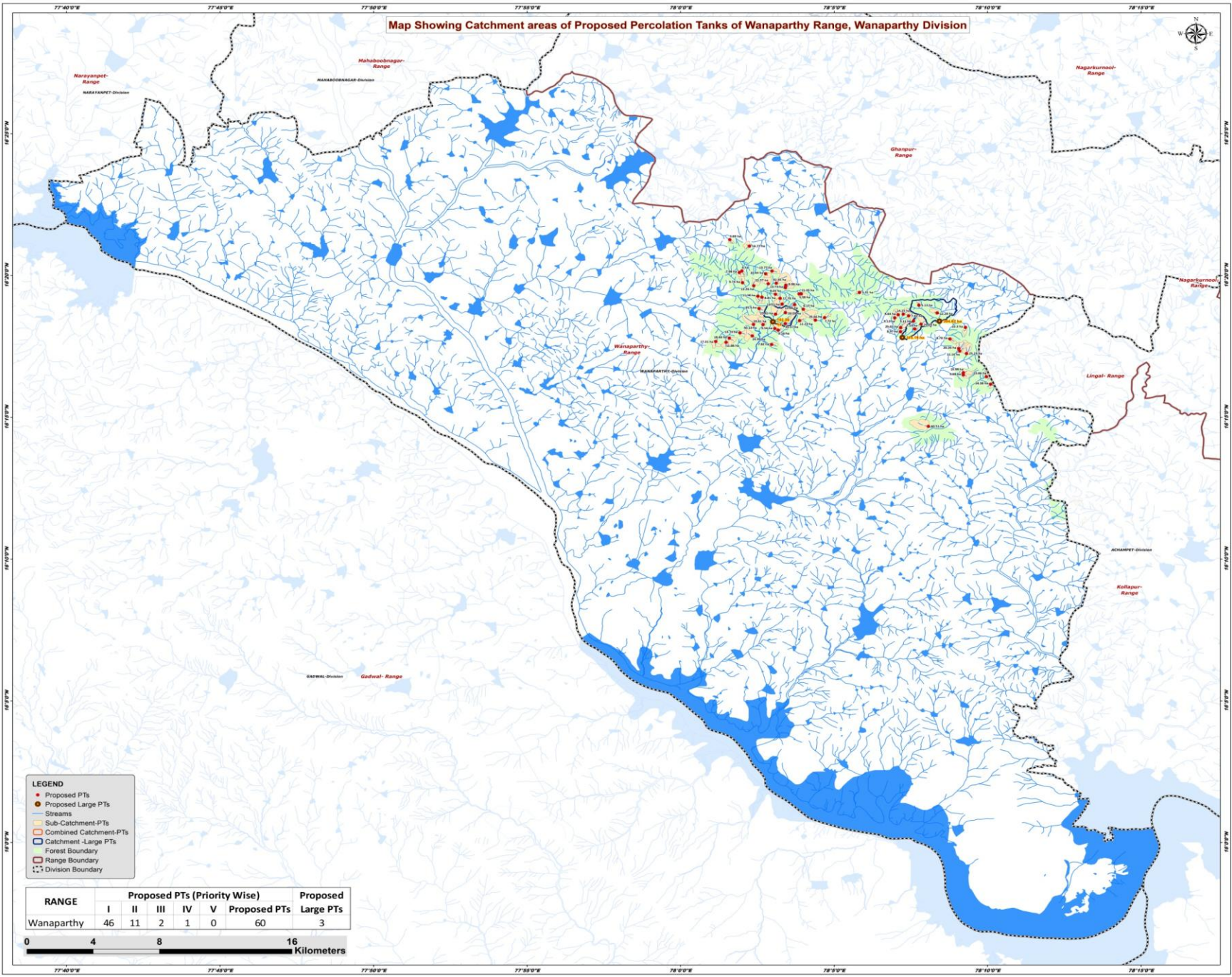


- LEGEND**
- Proposed PTs
  - Existing CDIPs
  - Contours
  - Streams
  - - - Watershed Boundary
  - Compartment Boundary
  - Beat Boundary
  - Range Boundary
  - - - Division Boundary
  - Suitability Index
  - CCTs/SCTs - Highly Suitable
  - CCTs/SCTs - Moderately Suitable
  - CCTs/SCTs - Least Suitable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

Large PTs			
ID	Longitude	Latitude	Catchment Area_Ha
4	78.120501	16.296873	115.19
5	78.140584	16.306478	304.62
6	78.050184	16.306145	182.36



Map Showing Catchment areas of Proposed Percolation Tanks of Wanaparthy Range, Wanaparthy Division



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

RANGE	Proposed PTs (Priority Wise)					Proposed Large PTs
	I	II	III	IV	V	
Wanaparthy	46	11	2	1	0	60
						3



77°40'0"E 77°45'0"E 77°50'0"E 77°55'0"E 78°00'0"E 78°05'0"E 78°10'0"E 78°15'0"E

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

S. No.	Beat	Proposed PT's
1	AGRAHAR	8
2	DATTAIPALLY	6
3	ECO PARK	13
4	GOPLAPUR	11
5	KASHIMNAGAR	1
6	MADHAVRAOPALLY	4
7	PANGAL	1
8	PEDDAGUDEM	1
9	REMADDULA	5
10	SAVAIGUDEM	3
11	WANAPARTHY	7
	<b>Total</b>	<b>60</b>

## List of Proposed PTs – Wanaparthy Range

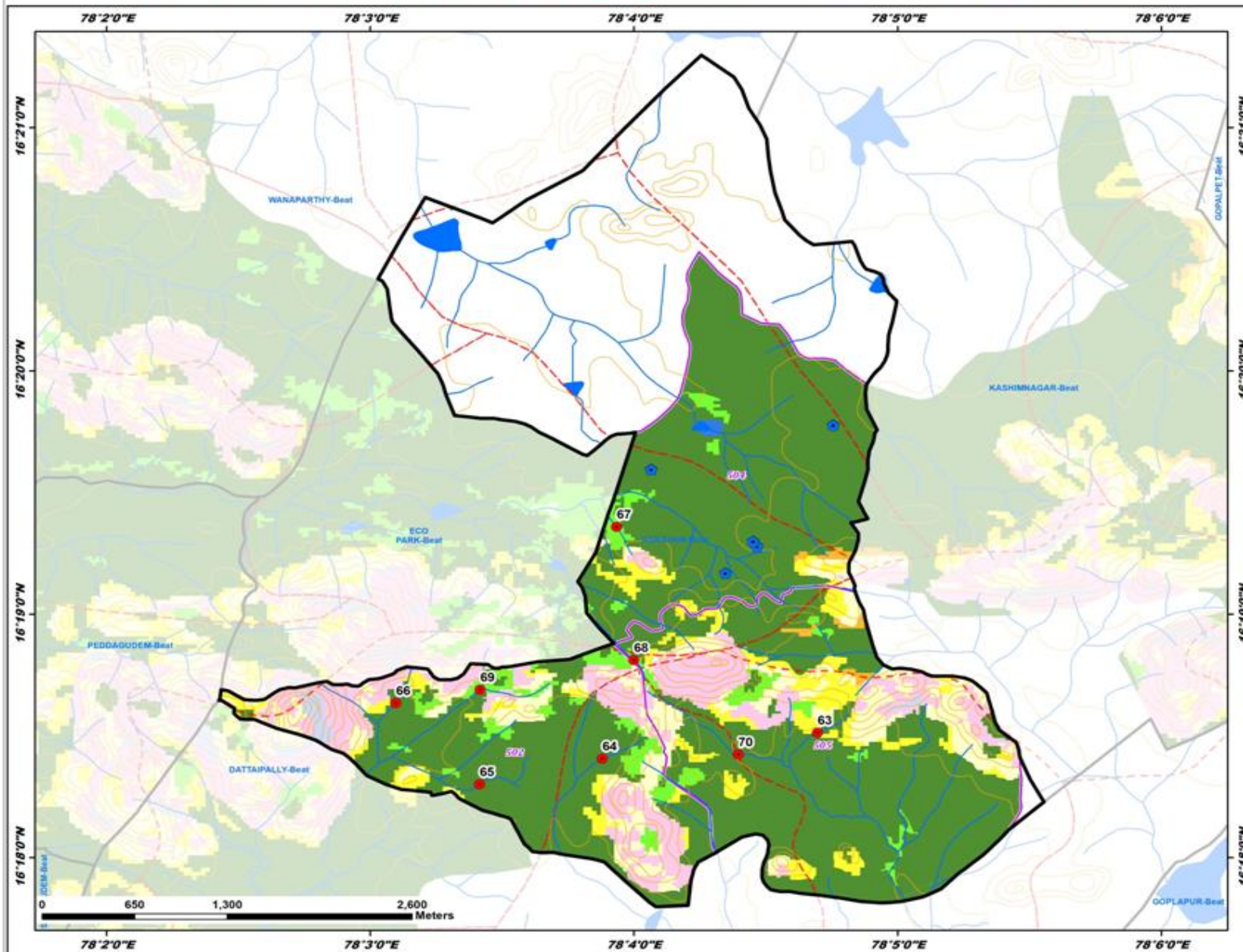
ID	Latitude	Longitude	Catchment Area_Ha	Priority	Beat
31	16.301887	78.127237	7.19	I	GOPLAPUR
32	16.311331	78.139406	12.28	I	GOPLAPUR
33	16.300296	78.119434	8.97	I	GOPLAPUR
34	16.306530	78.126516	5.11	I	GOPLAPUR
35	16.310283	78.118200	8.64	I	GOPLAPUR
36	16.315864	78.129435	5.13	I	GOPLAPUR
37	16.310600	78.120994	14.25	I	GOPLAPUR
38	16.308396	78.116357	9.12	I	GOPLAPUR
39	16.309629	78.123848	7.42	I	GOPLAPUR
40	16.304715	78.130637	25.28	II	GOPLAPUR
41	16.302751	78.119553	25.81	III	GOPLAPUR
42	16.323367	78.097195	5.31	I	KASHIMNAGAR
43	16.296022	78.146294	8.78	I	REMADDULA
44	16.290387	78.151074	20.26	I	REMADDULA
45	16.302839	78.154710	10.30	I	REMADDULA
46	16.288875	78.151623	11.16	I	REMADDULA
47	16.287462	78.155334	25.29	II	REMADDULA
48	16.273889	78.166080	23.86	I	MADHAVRAOPALLY
49	16.269437	78.168394	14.38	I	MADHAVRAOPALLY
50	16.274858	78.153524	9.68	I	MADHAVRAOPALLY
51	16.276193	78.153615	15.99	I	MADHAVRAOPALLY
52	16.244654	78.134615	60.51	IV	PANGAL
53	16.297859	78.038993	24.99	I	DATTAIPALLY
54	16.301232	78.053095	9.16	I	DATTAIPALLY
55	16.292795	78.049508	7.82	I	DATTAIPALLY
56	16.302192	78.051261	9.54	I	DATTAIPALLY
57	16.304436	78.044852	19.61	II	DATTAIPALLY
58	16.304548	78.039669	50.13	III	DATTAIPALLY
59	16.299595	78.032348	13.73	I	PEDDAGUDEM
60	16.296529	78.026554	18.66	I	SAVAIGUDEM
61	16.294082	78.024791	11.86	I	SAVAIGUDEM
62	16.294568	78.019161	17.01	I	SAVAIGUDEM
63	16.308563	78.078276	7.72	I	AGRAHAR
64	16.306786	78.064683	12.23	I	AGRAHAR
65	16.305020	78.056916	20.57	I	AGRAHAR
66	16.310590	78.051619	25.81	II	AGRAHAR
67	16.322658	78.065582	11.35	II	AGRAHAR
68	16.313531	78.066674	6.17	II	AGRAHAR
69	16.311508	78.056958	33.09	II	AGRAHAR
70	16.307070	78.073267	35.66	II	AGRAHAR

ID	Latitude	Longitude	Catchment Area_Ha	Priority	Beat
71	16.322546	78.064422	5.38	I	ECO PARK
72	16.320619	78.044226	8.81	I	ECO PARK
73	16.321199	78.042043	11.38	I	ECO PARK
74	16.326145	78.056967	13.73	I	ECO PARK
75	16.327668	78.057198	9.98	I	ECO PARK
76	16.319901	78.054132	17.78	I	ECO PARK
77	16.316219	78.061967	11.86	I	ECO PARK
78	16.328514	78.047646	22.57	I	ECO PARK
79	16.316498	78.055207	11.51	I	ECO PARK
80	16.335978	78.049699	13.77	I	ECO PARK
81	16.313970	78.042691	25.50	II	ECO PARK
82	16.328825	78.051997	41.45	II	ECO PARK
83	16.322304	78.051569	8.26	II	ECO PARK
84	16.334366	78.046314	10.44	I	WANAPARTHY
85	16.354382	78.026812	5.89	I	WANAPARTHY
86	16.335118	78.031977	7.98	I	WANAPARTHY
87	16.336016	78.033343	6.00	I	WANAPARTHY
88	16.350638	78.037441	14.77	I	WANAPARTHY
89	16.327347	78.039786	13.26	I	WANAPARTHY
90	16.329109	78.033723	9.74	I	WANAPARTHY

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



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
63	16.308563	78.078276	7.72	I
64	16.306796	78.064683	12.23	I
65	16.305020	78.056916	20.57	I
66	16.332590	78.051619	25.81	II
67	16.322658	78.065582	11.35	II
68	16.313531	78.066674	6.17	II
69	16.311508	78.056958	33.09	II
70	16.307070	78.073267	35.66	II

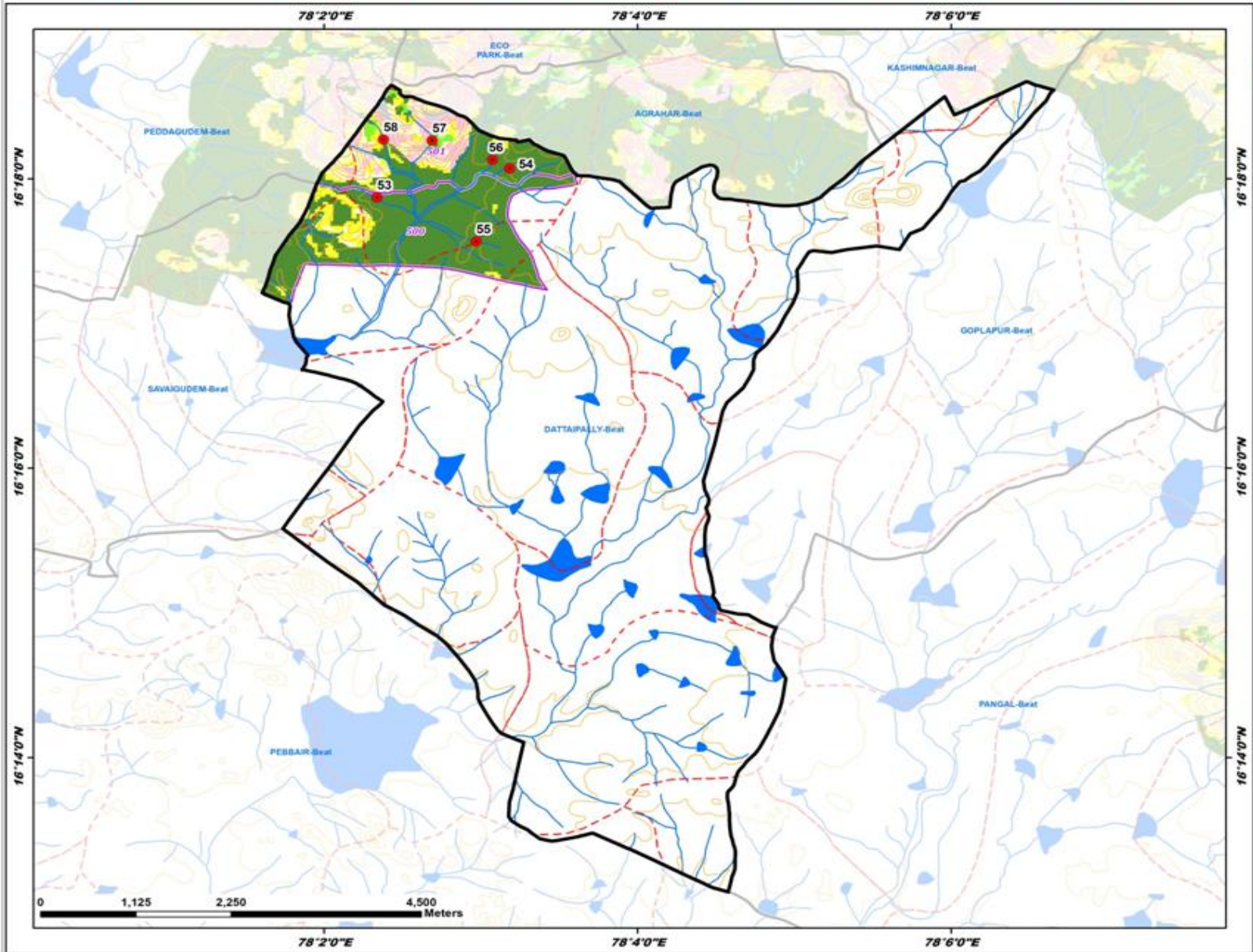
### LEGEND

- 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 Dattaipally Beat



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
53	16.297859	78.038993	24.99	I
54	16.302232	78.053095	9.16	I
55	16.292795	78.049508	7.82	I
56	16.302192	78.051263	9.54	I
57	16.304436	78.044852	19.61	II
58	16.304548	78.039669	50.13	III

**LEGEND**

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

**Suitability Index**

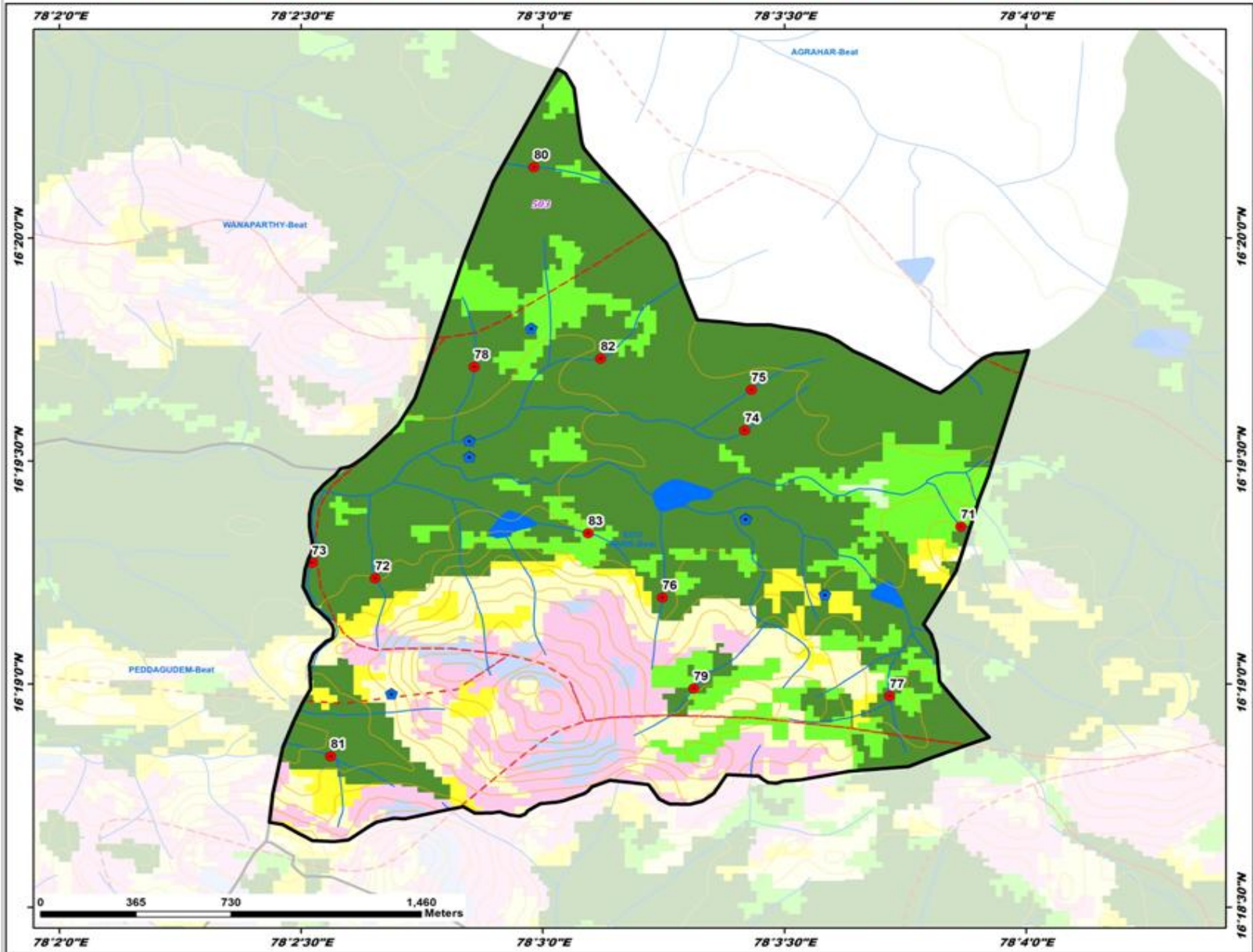
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body



# Map Showing Suitability Index for Construction of SMC Works of Eco Park Beat



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
71	16.322546	78.064422	5.38	I
72	16.320619	78.044226	8.81	I
73	16.321199	78.042043	11.38	I
74	16.326145	78.056967	13.73	I
75	16.327668	78.057198	9.98	I
76	16.319901	78.054132	17.78	I
77	16.316219	78.061967	11.86	I
78	16.328514	78.047646	22.57	I
79	16.316498	78.055207	11.51	I
80	16.335978	78.049699	13.77	I
81	16.313970	78.042691	25.50	II
82	16.328825	78.051997	41.45	II
83	16.322304	78.051569	8.26	II

**LEGEND**

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

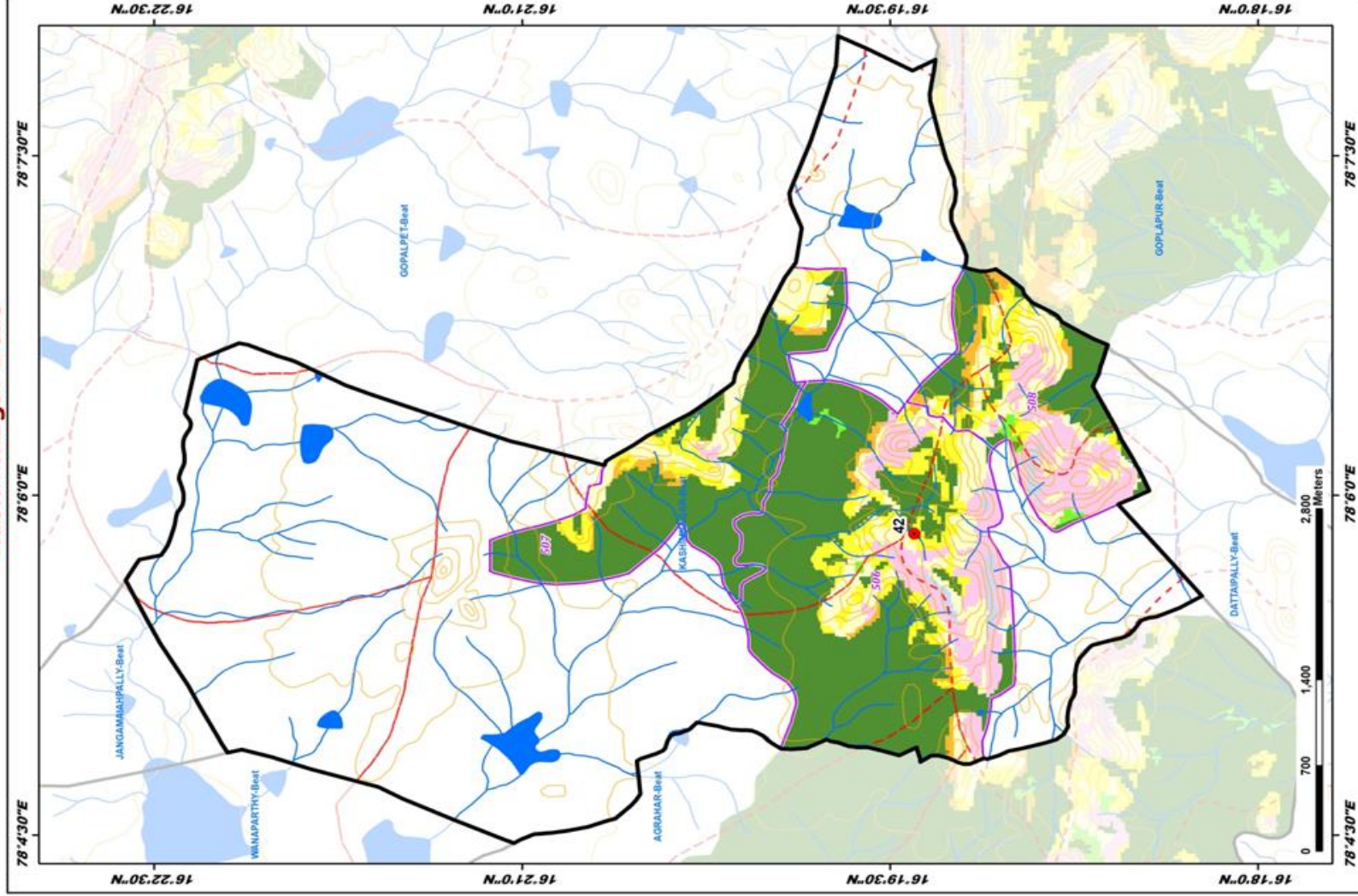
**Suitability Index**

- 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 Kashmirnagar Beat



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
42	16.32387	78.09795	5.31	1

## LEGEND

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

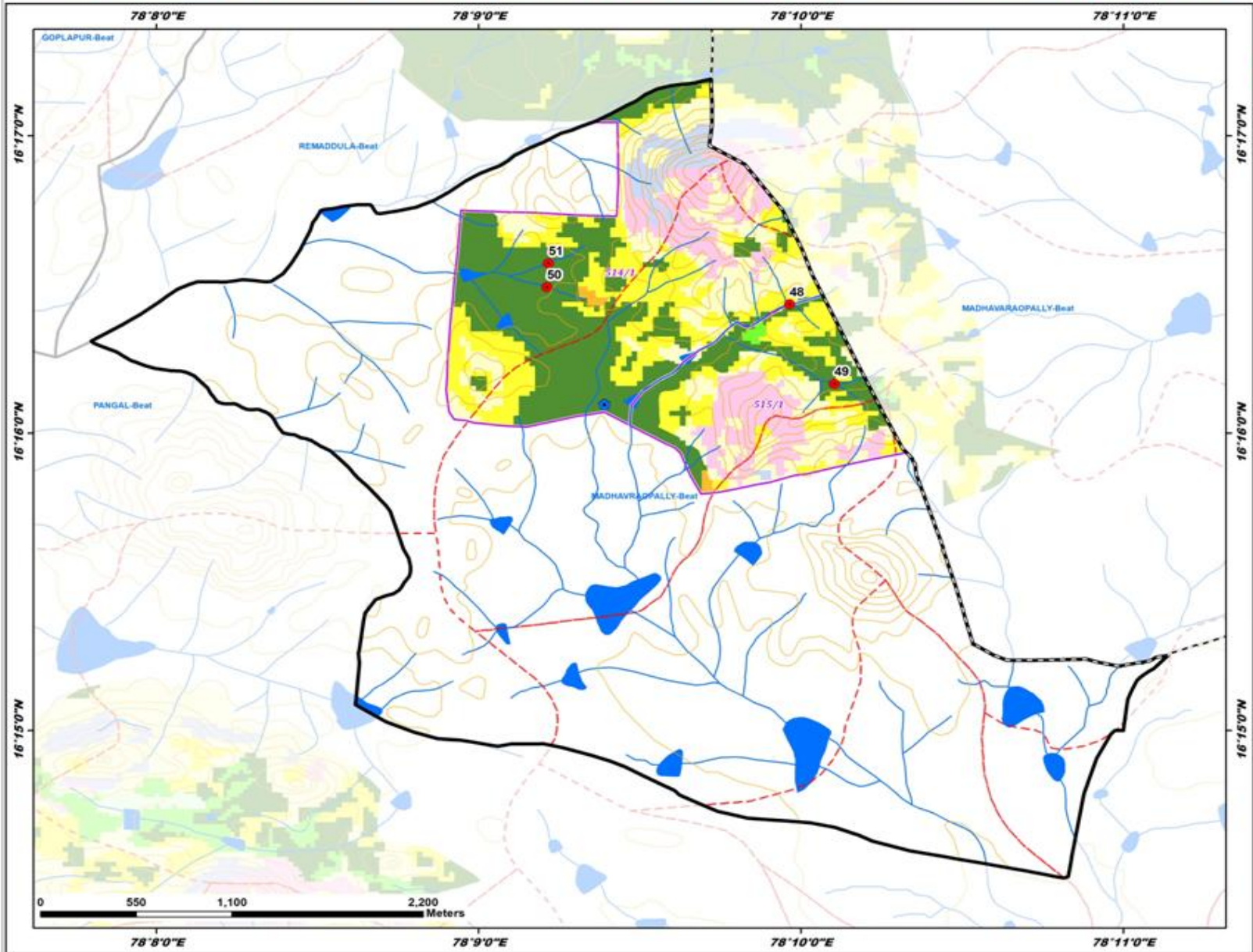
## Suitability Index

- 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 Madhavrapally Beat



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
48	16.273889	78.166080	23.86	I
49	16.289437	78.168394	14.38	I
50	16.274858	78.153524	9.68	I
51	16.276193	78.153615	15.99	I

**LEGEND**

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

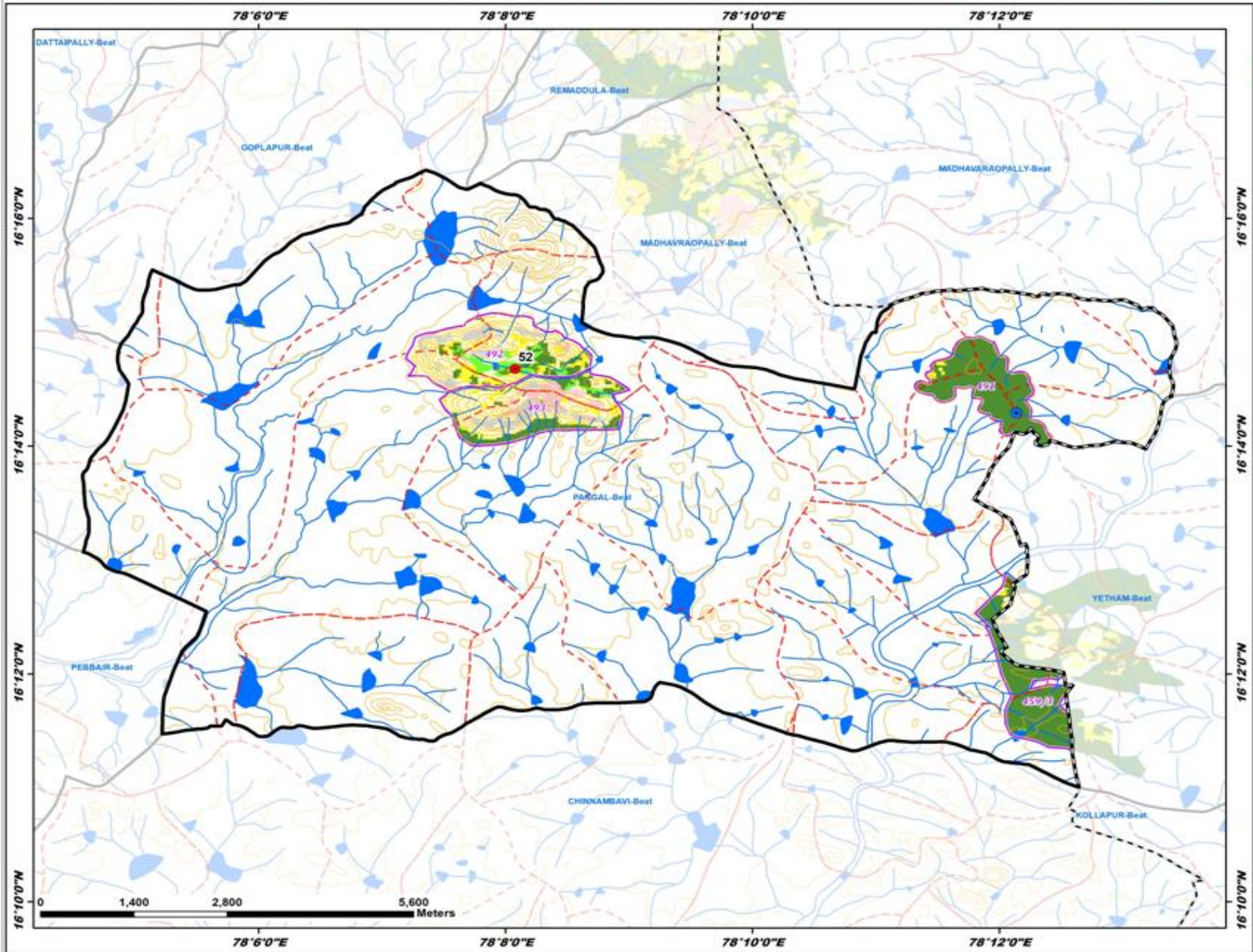
**Suitability Index**

- 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 Pangal Beat



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
52	16.244654	78.134615	60.51	IV

**LEGEND**

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

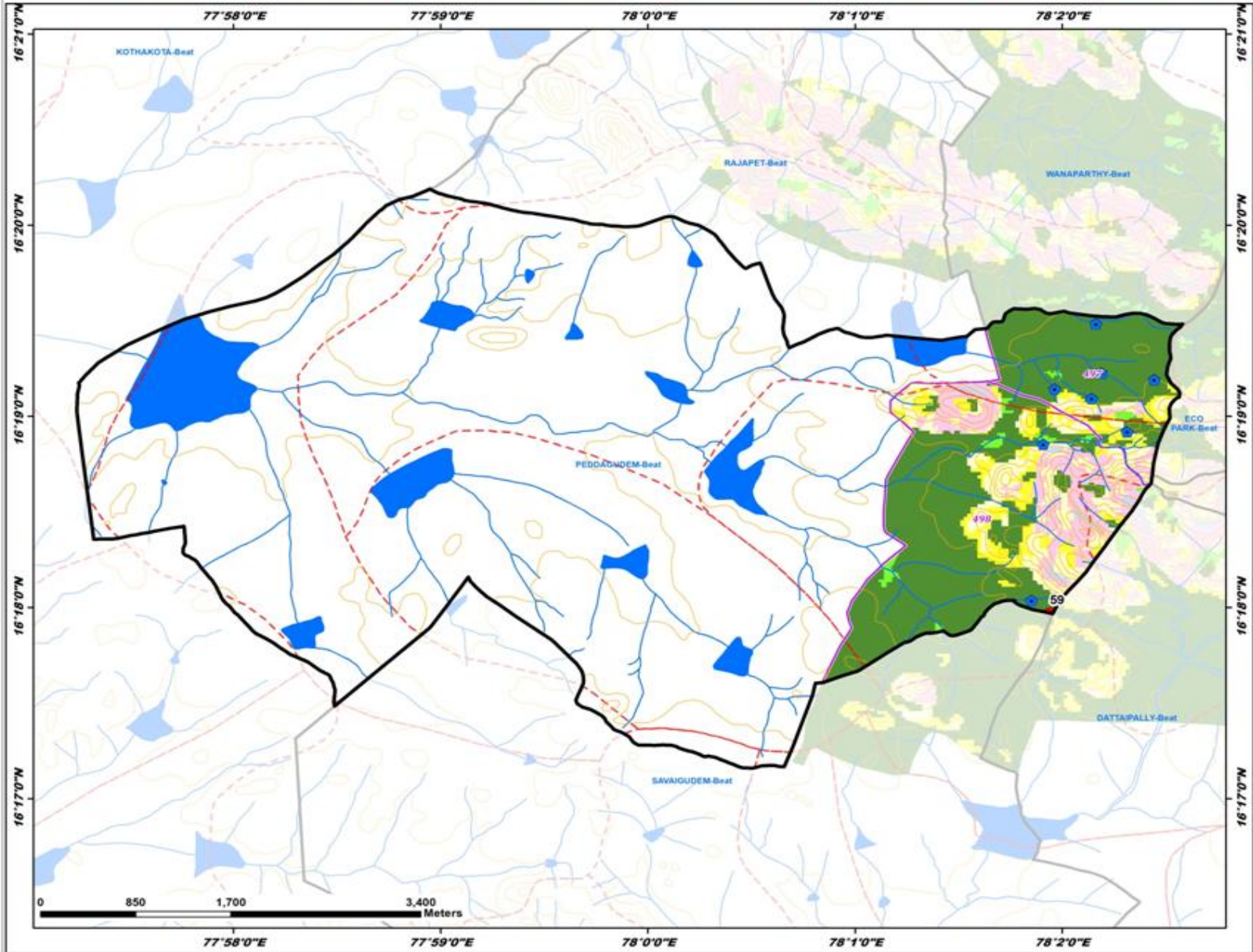
**Suitability Index**

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

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



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
59	16.299595	78.032348	13.73	I

**LEGEND**

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

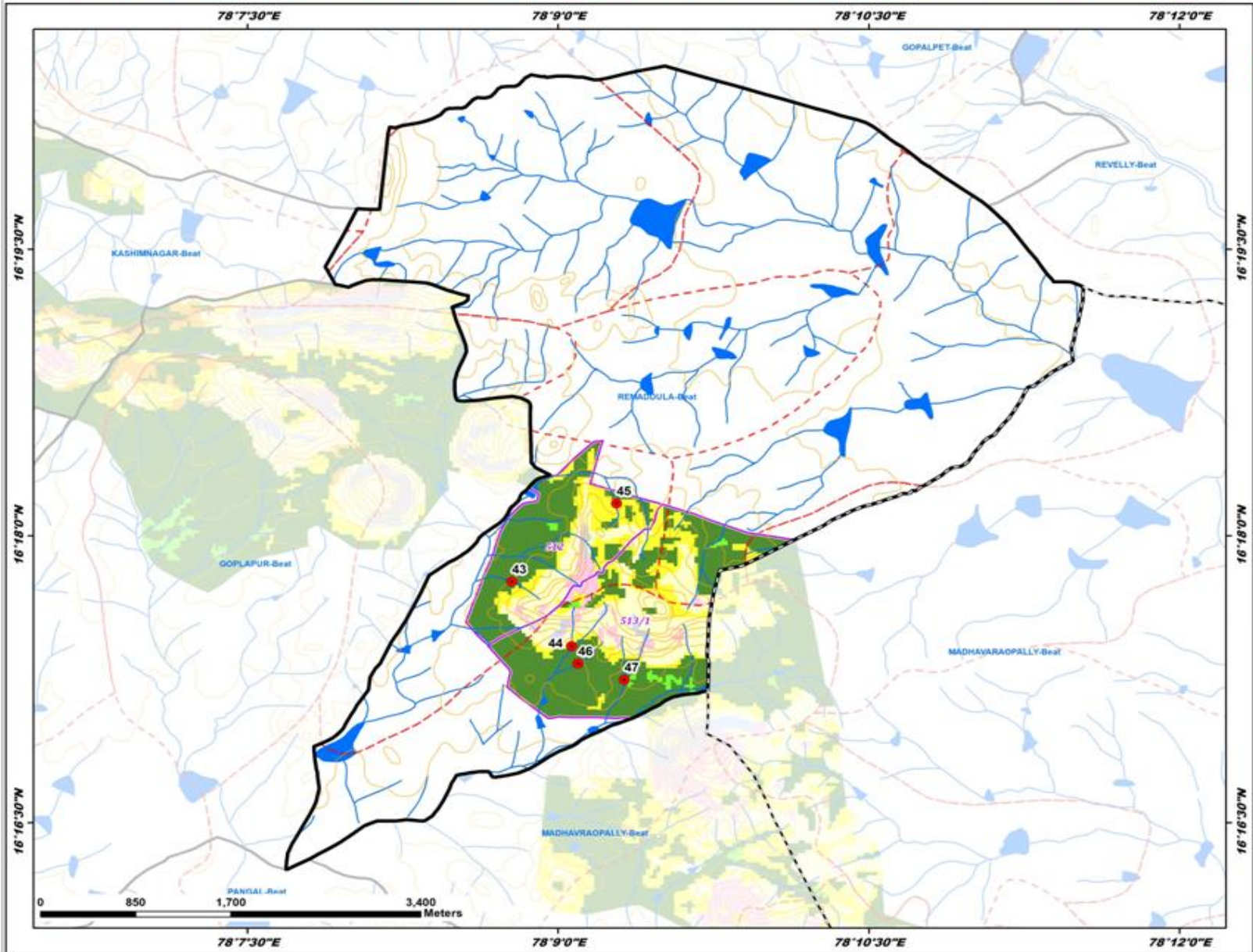
**Suitability Index**

- 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 Remaddula Beat



Division : Wanaparthy  
Range : Wanaparthy



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
43	16.296022	78.146294	8.78	I
44	16.290387	78.151074	20.26	I
45	16.302839	78.154730	10.30	I
46	16.298875	78.151623	11.16	I
47	16.287462	78.155334	25.29	II

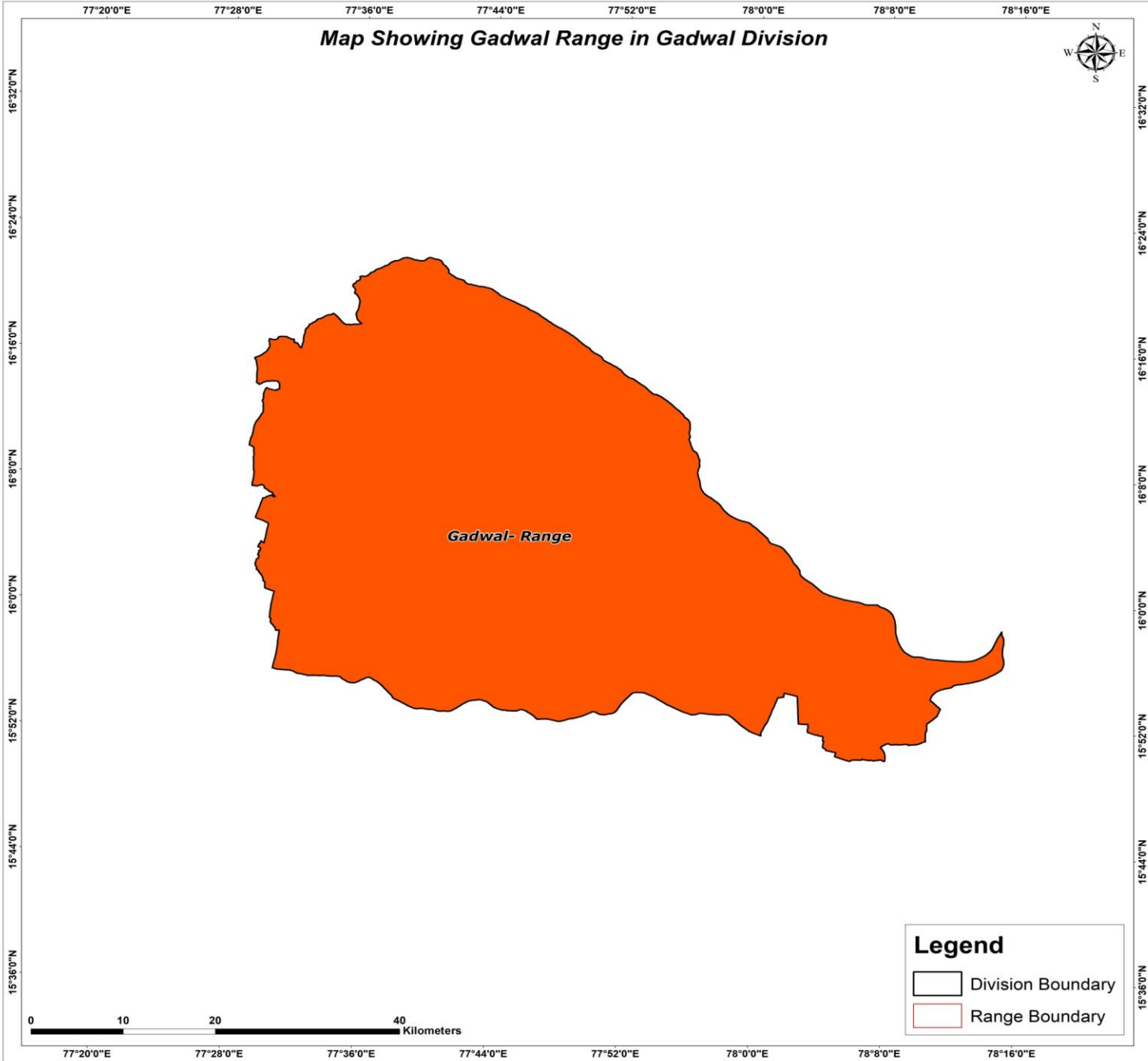
**LEGEND**

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

**Suitability Index**

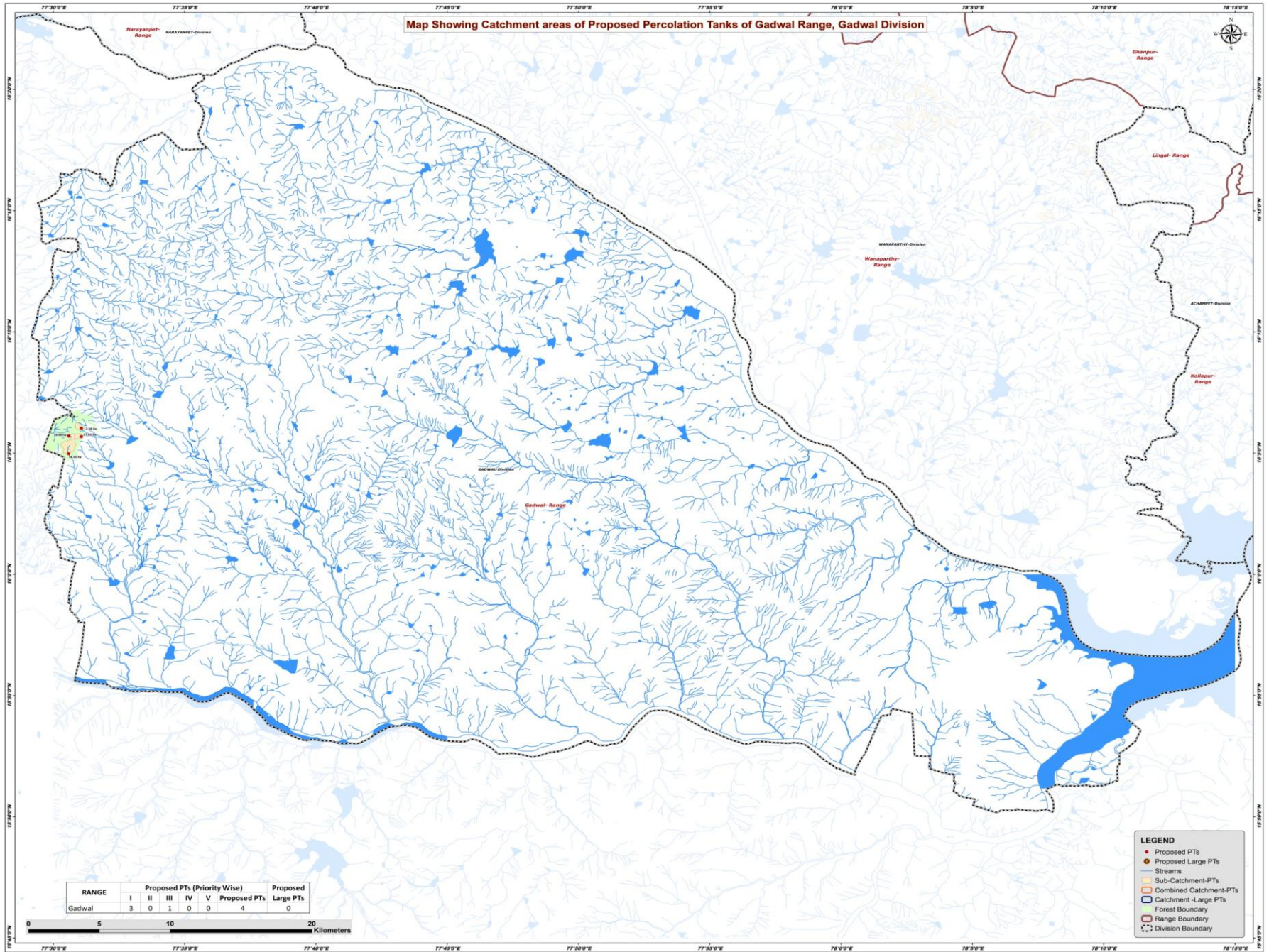
- CCTs/SCTs - Highly Suitable
- CCTs/SCTs - Moderately Suitable
- CCTs/SCTs - Least Suitable
- PTs - Highly Suitable
- PTs - Moderately Suitable
- PTs - Least Suitable
- MPTs and SGPs - Suitable
- Not Suitable
- Water Body

# Map Showing Gadwal Range in Gadwal Division





Map Showing Catchment areas of Proposed Percolation Tanks of Gadwal Range, Gadwal Division



RANGE	Proposed PTs (Priority Wise)					Proposed Large PTs
	I	II	III	IV	V	
Gadwal	3	0	1	0	0	4

0 5 10 20 Kilometers

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

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

S. No.	Beat	Proposed PT's
1	GATTU	4
	<b>Total</b>	<b>4</b>

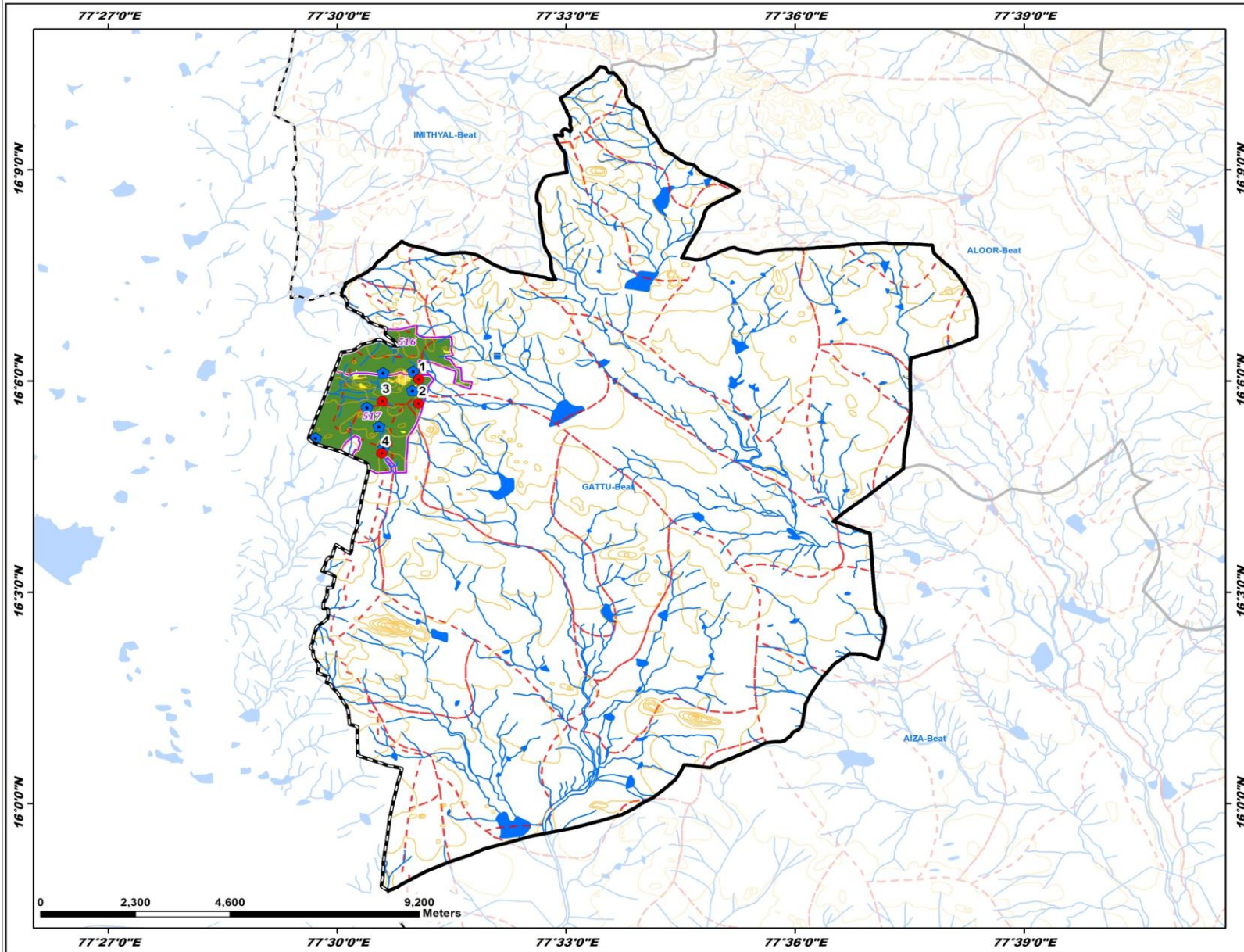
## List of Proposed PTs – Gadwal Range

ID	Latitude	Longitude	Catchment Area_Ha	Priority	BEAT
1	16.100424	77.517825	17.58	I	GATTU
2	16.094668	77.517740	17.82	I	GATTU
3	16.095221	77.509817	14.44	I	GATTU
4	16.082874	77.509714	78.55	III	GATTU

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



Division : Gadwal  
Range : Gadwal



ID	Latitude	Longitude	Catchment Area Ha	PRIORITY
1	16.100424	77.517825	17.58	I
2	16.094668	77.517740	17.82	I
3	16.095221	77.509817	14.44	I
4	16.082874	77.509714	78.55	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