

# Drainage ditches

## Project – Assignment 3

Implementing a comprehensive maintenance and upgrade program for drainage ditches to optimize water flow and mitigate environmental risks.

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Water bodies and Rivers:



## Water Bodies And River Layer intersection:



->The intersection indicates areas where waterbodies and rivers overlap, highlighting potential areas where drainage channels or ditches might be necessary to manage water flow.

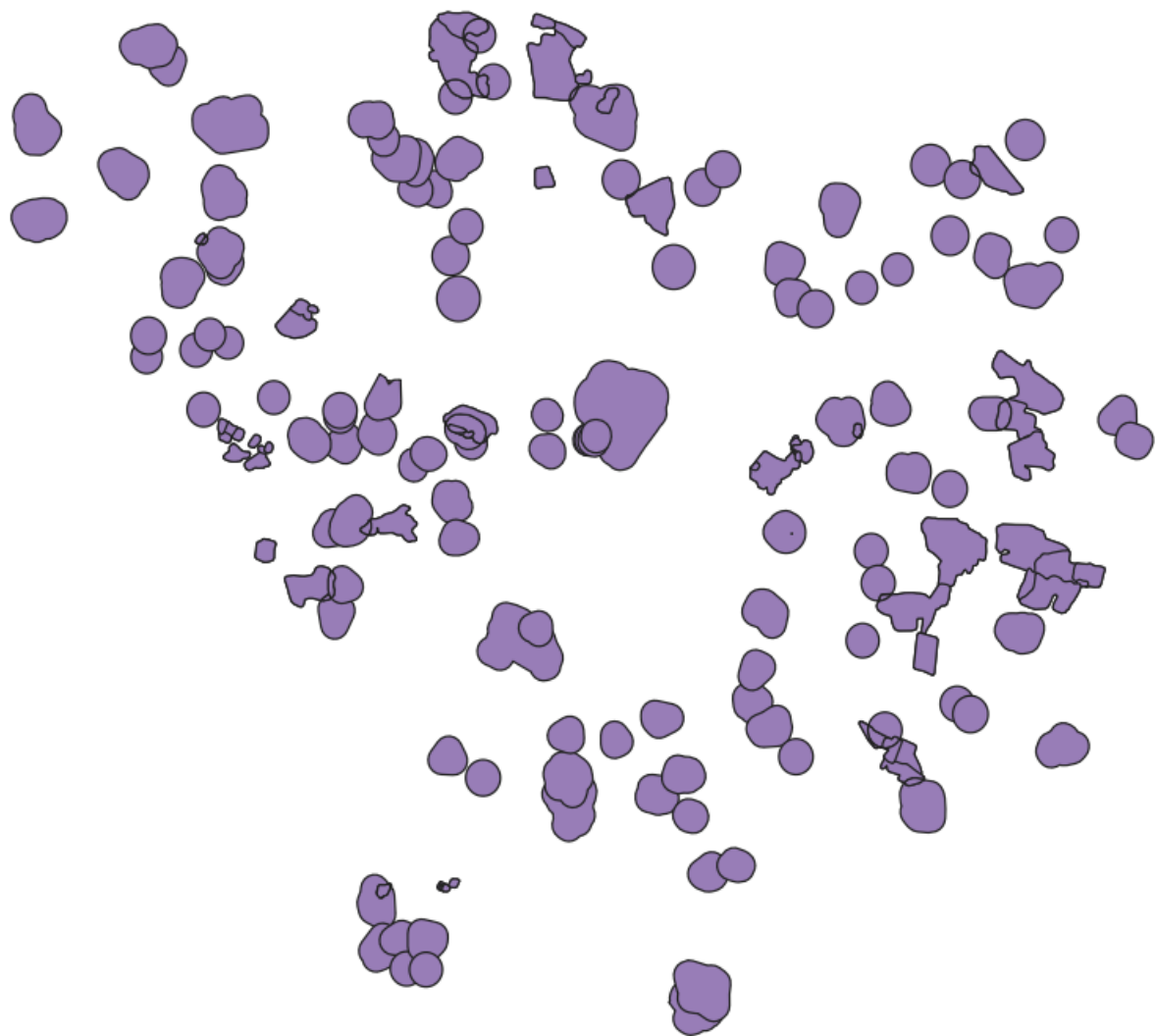
->The intersection can help in planning the most effective routes for drainage ditches, minimizing environmental disruption while maximizing drainage efficiency.

->Analysing the intersection of waterbodies and river layers is crucial for informed decision-making in drainage ditches projects, ensuring that the drainage system is efficient, environmentally sustainable, and minimally disruptive to the natural ecosystem.

Vegetation And Forest and Waterbodies :



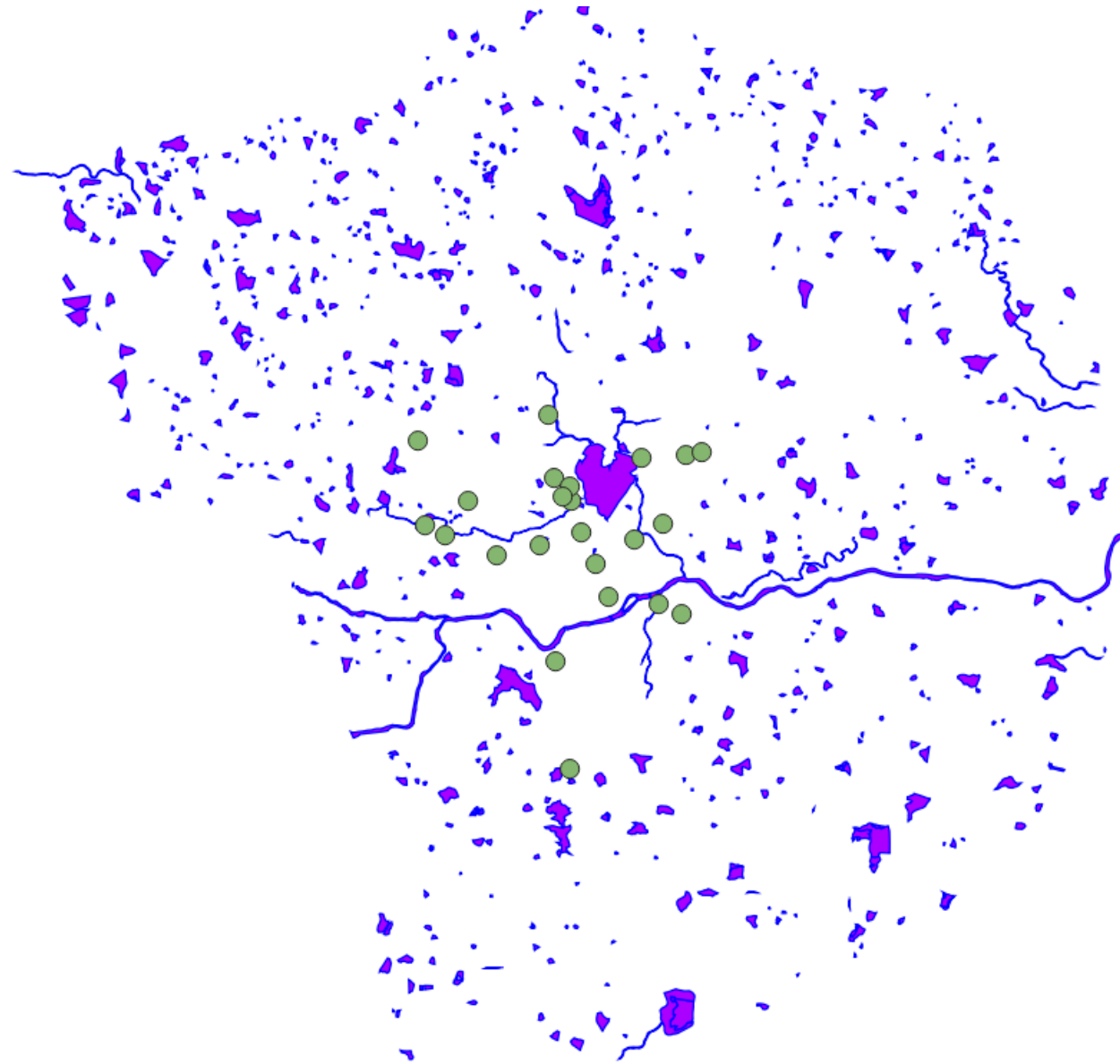
## Vegetation And Forest and Waterbodies Union:



From the union region of water bodies and vegetation/forest layers, you can conclude areas where the two layers overlap or coexist. This could indicate areas where water bodies are surrounded by vegetation or forest, which may be relevant for your drainage ditches project. Additionally, it could highlight areas where the natural environment is more interconnected, which may impact drainage planning and management.



# Tanks and inundation



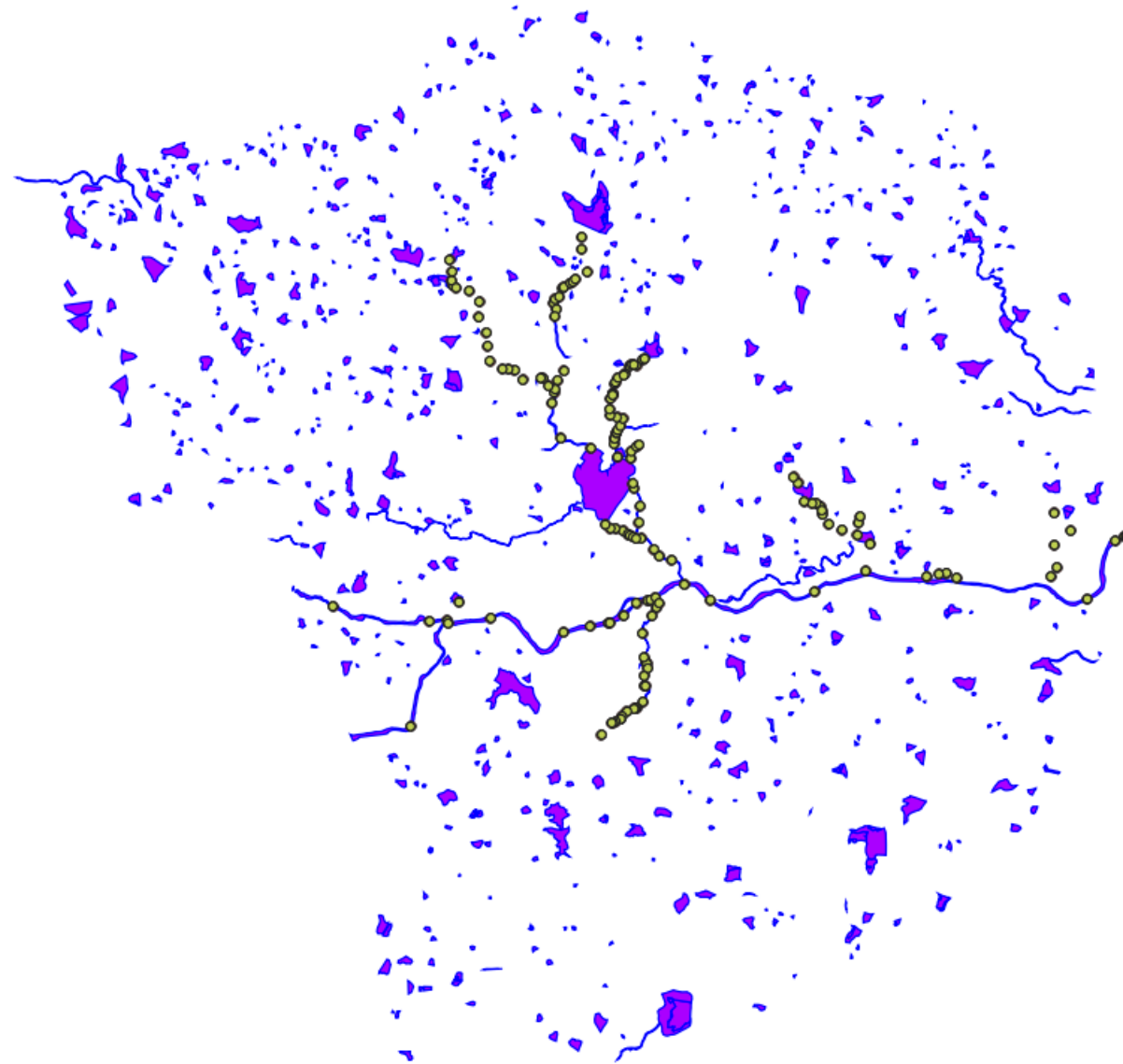
# Tanks and inundation Distance :



	fid	Name	OID	FolderPath	SymbolID	AltMode	Base	HasLabel	LabelID	HubName	HubDist
1	1	BALKAMPET RUB	1	MAJOR WATER ...	0	-1	0	-1	0	NULL	459.015449474...
2	2	NEAR APOLLO ...	2	MAJOR WATER ...	0	-1	0	-1	0	NULL	230.434741969...
3	3	NEAR TAPADIA ...	3	MAJOR WATER ...	0	-1	0	-1	0	NULL	750.173297293...
4	4	FIZA HOTEL,BH...	4	MAJOR WATER ...	0	-1	0	-1	0	NULL	1710.89857671...
5	5	OPP BEGUM BA...	5	MAJOR WATER ...	0	-1	0	-1	0	NULL	886.523244643...
6	6	RETHIBOWLI JU...	6	MAJOR WATER ...	0	-1	0	-1	0	NULL	1091.60102741...
7	7	NEAR GALAXY ...	7	MAJOR WATER ...	0	-1	0	-1	0	NULL	1929.59793636...
8	8	LAKDIKAPUL	8	MAJOR WATER ...	0	-1	0	-1	0	NULL	2347.91640413...
9	9	Bombay Hotel, ...	9	MAJOR WATER ...	0	-1	0	-1	0	NULL	1810.51152373...
10	10	MODEL HOUSE,...	10	MAJOR WATER ...	0	-1	0	-1	0	NULL	613.185239732...
11	11	LAKE VIEW GUE...	11	MAJOR WATER ...	0	-1	0	-1	0	NULL	364.532055496...
12	12	VILLA MARY C...	12	MAJOR WATER ...	0	-1	0	-1	0	NULL	1528.45561956...
13	13	KCP JUNCTION ...	13	MAJOR WATER ...	0	-1	0	-1	0	NULL	647.240711809...
14	14	NEERU'S SHOW...	14	MAJOR WATER ...	0	-1	0	-1	0	NULL	1275.29982931...
15	15	MINERVA HOTE...	15	MAJOR WATER ...	0	-1	0	-1	0	NULL	701.328566115...
16	16	OLIPHANT BRI...	16	MAJOR WATER ...	0	-1	0	-1	0	NULL	1447.89769284...
17	17	NAMPALLY T JU...	17	MAJOR WATER ...	0	-1	0	-1	0	NULL	528.928981789...
18	18	OPP MEDIVISIO...	18	MAJOR WATER ...	0	-1	0	-1	0	NULL	2149.98341188...
19	19	MOGHAL ENGI...	19	MAJOR WATER ...	0	-1	0	-1	0	NULL	635.793891366...
20	20	MALAKPET GUNJ	20	MAJOR WATER ...	0	-1	0	-1	0	NULL	2535.71113291...
21	21	MALAKPET RUB	21	MAJOR WATER ...	0	-1	0	-1	0	NULL	367.651870408...
22	22	CHILKALGUDA ...	22	MAJOR WATER ...	0	-1	0	-1	0	NULL	1027.30845551...
23	23	SHAIKPET NALA	23	MAJOR WATER ...	0	-1	0	-1	0	NULL	162.992152444...

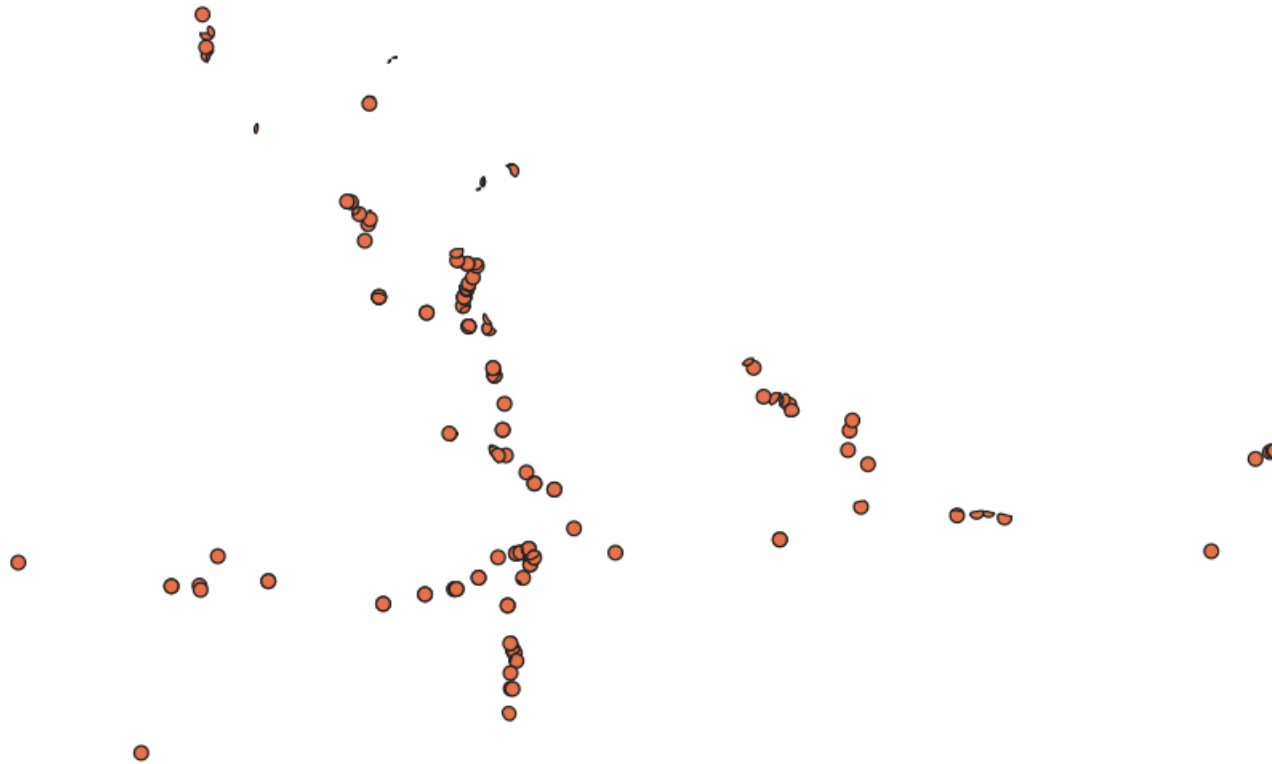
->In QGIS, you can perform a vector analysis to calculate the distance between tanks and inundation layers for your drainage ditches project. This analysis can help determine the proximity of tanks to areas prone to flooding, aiding in the planning of drainage systems. The results can highlight areas where drainage ditches may be most effective in managing water flow and mitigating flood risks.

## Structures and Tanks:





## Structures and tanks intersection:



- ➔ From the intersection between tanks and structures layers in your drainage ditches project, you can conclude the areas where tanks and structures overlap, indicating potential obstacles or constraints for drainage ditches.
- ➔ This analysis can help in identifying areas where modifications to tanks or structures might be needed to accommodate drainage infrastructure. Additionally, it can highlight areas where careful planning is required to avoid interference with existing infrastructure.