



MANILA WATER
CARE IN EVERY DROP

GIS - Critical Activity Review Integration

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Asset Management Department

Strategic Asset Management Group

Manila Water

East Concessionaire of Metro Manila

Regulated by Metropolitan Waterworks and Sewerage System (MWSS)

- To improve the water supply and wastewater infrastructure in the East Zone Concession Area of Metro Manila and the adjacent province of Rizal.



Manila Water Company Inc.



1400 sq km

6.2 M population

23 cities and municipalities

922,000 Water Service Connections

3 Water Treatment Plants

- 1600 mld

2 Septage Treatment Plants

- 2400 mld

5000 km of pipe

- 300 km are primary

GIS - Critical Activity Review Integration

- Is a Geographic Web Application which create and shows the locations of planned and unplanned (emergency) activities within the pipe network and it's facilities.

Objective

- Create a real-time web-based application for viewing, monitoring and analyzing Critical (planned and unplanned) Activities for operational use of System Analytics Department.

Integration

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CRITICAL ACTIVITY REVIEW

CAR No. _____ **Business Area/Department** _____

BZ/Grid _____ **Name** _____ **email** _____ **cell no.** _____

DMZ/Facility _____ **Dept. Head** _____ **Location** _____

Event/Incident _____ **Activity** _____

Classification _____ **Time of completion of Activity** _____

Duration (HH:MM:SS) _____

Classification of affected area _____ **Duration (HH:MM:SS)** _____

A. Methodology and milestones

Milestone #	Activity	Prepared Date & Time
Milestone #1	Research Completion	20240925 13:30
Milestone #2	Interpretation of results	20240926 12:00
Milestone #3	Physical installation	20240928 09:00
Milestone #4	Report generation	20240929 09:30

B. Detailed Methodology / Gantt Chart

Activity	Prepared Date & Time	Duration (hr.)
Research Completion	20240925 13:30	
Change of Filter at Reservoir (see Res#)	20240926 08:00	
Change of Filter at Res#1 (see Res#1)	20240926 09:30	
Change of Filter at Res#2 (see Res#2)	20240926 11:00	
Change of Filter at Res#3 (see Res#3)	20240926 13:00	
Change of Filter at Res#4 (see Res#4)	20240926 15:00	
Change of Filter at Reservoir (see Res#)	20240926 18:00	

GIS Web Application

Script

Map showing geographical data and a script window.

Activity Monitoring v4.xlsx [Shared] - Microsoft Excel

A	B	C	D	E	F	G	H	I	J	K	L
CAR No.	Scheduled To	Date and Time of CAPL	Business Area/Department	BZ/Grid	DMZ/Facility	Location	affected_area	no_of_affected_HH	affected Ebggs	Event/Incident	Activity
946	944	9/17/2015 3:30 PM	Water_Supply	Marikina_Grid	Intong Palag	Egg Silangan, Silangan Reservoir		None	None		Repa...
991	989	9/23/2015 10:26 AM	Water_Supply	Taguig_Grid	San Juan PS			none	none		Installa...
1003	1001	9/24/2015 10:00 AM	Water_Supply	Taguig	TagB22			none	none		Flushing
1005	1003	9/24/2015 12:30 PM	Water_Supply	San_Juan_Grid	N. Domingo			0			Replace
1016	1014	9/24/2015 9:27 PM	Water_Supply	SJB24	S1			78			Replace
1017	1015	9/25/2015 8:46 AM	Water_Supply	Passig	PS37			300			Installa...
1021	1019	9/25/2015 8:47 AM	Water_Supply	Mandaluyong	SJB23			2254			Decommission
1025	1023	9/25/2015 10:47 AM	Water_Supply	Rizal_Grid	Rizal Primar			0			Interconn
1028	1027	9/25/2015 1:53 PM	Water_Supply	Rizal	RizB22			222			Leak
1030	1028	9/25/2015 3:00 PM	Water_Supply	Rizal	RizB22			100			Leak
1033	1031	9/25/2015 1:45 PM	Water_Supply	Mandaluyong	SJB23			200			Breakage
1034	1032	9/26/2015 10:30 AM	Water_Supply	Rizal_Grid	Rizal Primar			0			Boring

SAD Master Data

Screenshot

Features and Functionalities

GIS LAYER VISIBILITY CONTROL

SEARCH

CAR ACTIVITY STATUS

WEB APP

WEB GIS



CAR INFO FROM EXCEL

NEW CAR INPUT

NETWORK INFO

Critical Activity Review

Search

Features selected: 7

66

Status: Completed

Activity_1: Yellow alert DMZ B8 Balara BA @11:30am 10June - emergency Leak repair 300mm PVC along Visayas Ave. in front of Turtles KTV Bgy. Project 6, QC. For full exposure and materials preparation by Contr. GPM INDUSTRIES CORP. /OIM:J Albea/SIM: J. Tumpang

Activity_2: Update on Yellow alert DMZ B8 Balara BA @1:20pm 10June - emergency leak repair 300mm PVC along Visayas Ave. Valve was closed at 1pm affecting 300 households. Two by 10 cu. meter tankers to be deployed on site for augmentation. OIM: J. Albea/ SIM: J. Tumpa

Activity_3: Final update on Yellow alert DMZ B8 Balara BA as of 5pm 10June Completed repair of 300mm PVC along Visayas Ave., Project 6, QC. Installed 2-stc and 2m short pipe. Line flushed and energized, all affected areas with water now. Back to green. OIM J.Albea SIM

Activity_4:

Activity_5:

Activity_6:

Activity_7:

Activity_8:

Activity_9:

Activity_10:

Activity_11:

Activity_12:

Activity_13:

Activity_14:

Activity_15:

75

Status: Completed

Activity_1: Yellow alert DMZ B6 Balara BA as of 11:20am 06June Mainline breakage of 200mm PVC (detached 45 degree elbow) affected by DUC along Road 8 corner Mindanao Ave., Bgy. Bagong Pagasa, QC. On-going materials preparation by ABDA. If valve is closed 1000 HH will

Activity_2: Update #1 on Yellow alert DMZ B6 Balara BA as of 1:45pm 06June Already withdrawn materials for repair, will be using 4 pcs Adaptor (F/M) and prefabricated electrofused HDPE elbow for repair. Valve already closed. OIM R. Asuncion

Activity_3: Final update on Yellow alert DMZ B6 Balara BA as of 4:5pm 5June- Re-leak repair along Road 8 corner Mindanao Ave., Bgy. Bagong Pagasa, QC, Completed flushing & energization done. Back to Green. OIM: R Asuncion

Activity_4:

Activity_5:

Activity_6:

Activity_7:

Activity_8:

Activity_9:

Activity_10:

Activity_11:

Activity_12:

Activity_13:

Activity_14:

Activity_15:

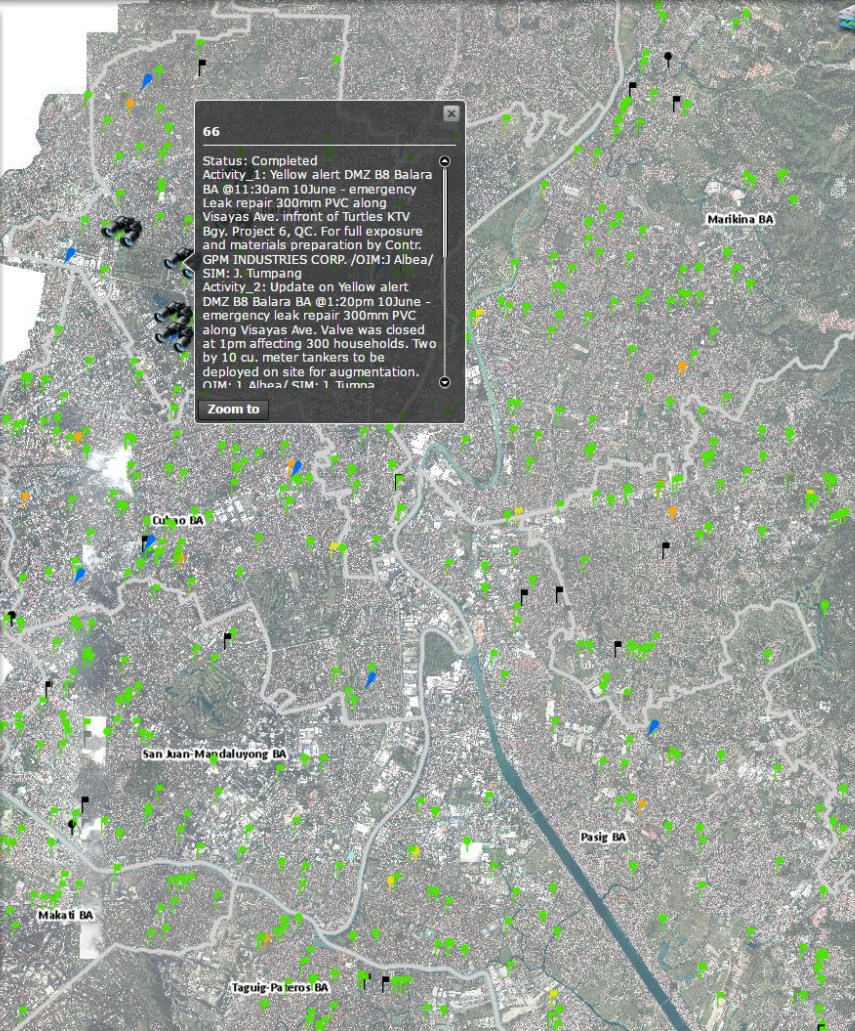
782

Status: Completed

Activity_1: Y alert Bal BA @1:52pm 02July: reported damage mainline due to DUC along Quezon ave, frtg East ave STR. Informed TSM L.Descalzo for immediate action. DTR: 1:50pm by Fox Neo8 R.Nepomuceno

Activity_2: Update @3pm 02July on Y alert DMZ6 Bal BA along Quezon ave: found 200mm HDPE line damage. Stat: Valve closed 2:40pm affecting 100hh, on going material prep & full exposure of pipe. OIM: R.Asuncion

Activity_3: Final update @ 9:40pm 03 July Balara BA along Quezon ave (DUC): completed repair 200mm HDPE line. Installed 3mtr pipe, 1 elbow



66

Status: Completed

Activity_1: Yellow alert DMZ B8 Balara BA @11:30am 10June - emergency Leak repair 300mm PVC along Visayas Ave. in front of Turtles KTV Bgy. Project 6, QC. For full exposure and materials preparation by Contr. GPM INDUSTRIES CORP. /OIM:J Albea/ SIM: J. Tumpang

Activity_2: Update on Yellow alert DMZ B8 Balara BA @1:20pm 10June - emergency leak repair 300mm PVC along Visayas Ave. Valve was closed at 1pm affecting 300 households. Two by 10 cu. meter tankers to be deployed on site for augmentation. OIM: J Albea/ SIM: J Tumpa

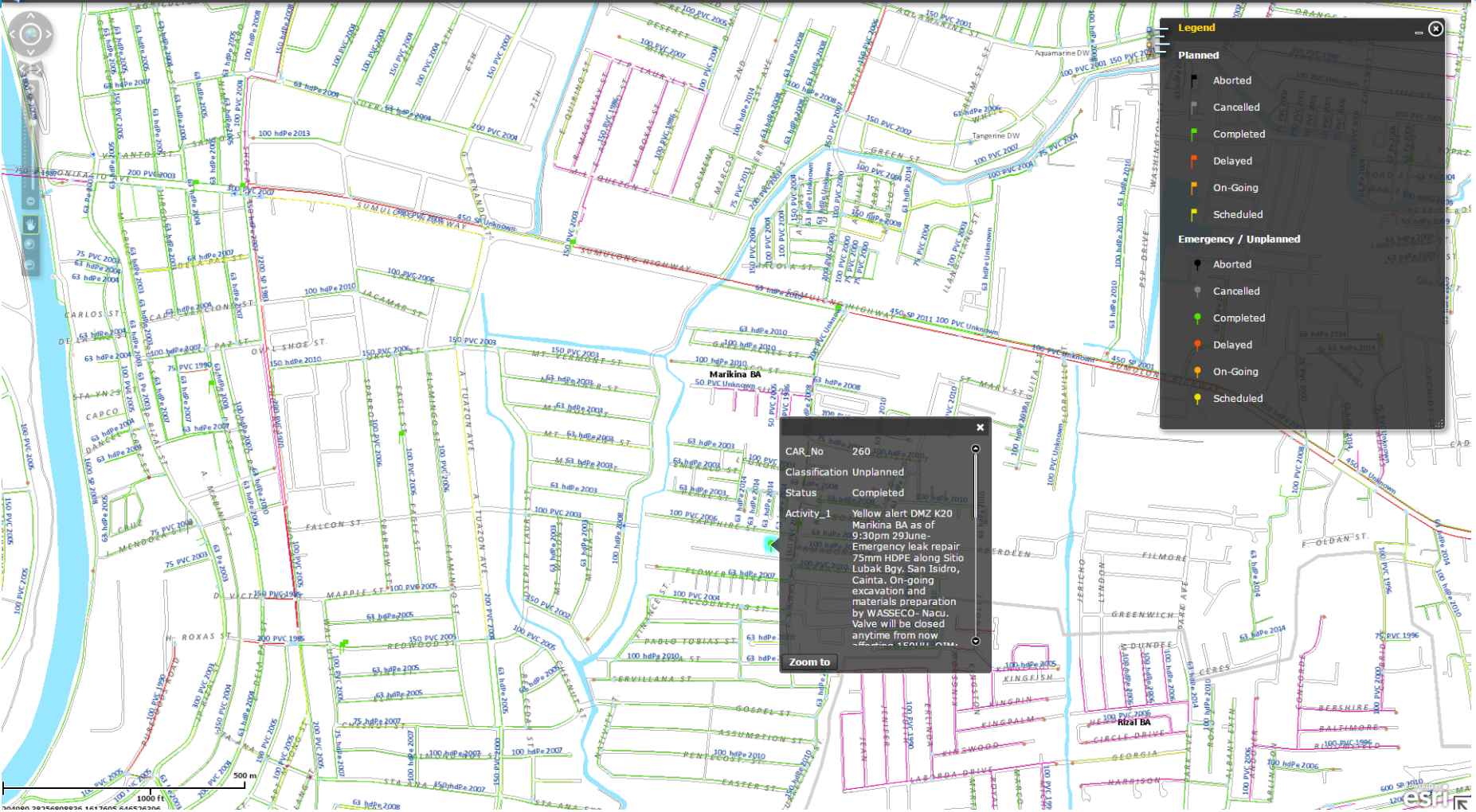
Zoom to

TOC

Layer Visibility

- Planned**
 - Aborted
 - Cancelled
 - Completed
 - Delayed
 - On-Going
 - Scheduled
- Emergency / Unplanned**
 - Aborted
 - Cancelled
 - Completed
 - Delayed
 - On-Going
 - Scheduled
- WaterLayers**
 - Water Network**
 - Deepwells
 - Fitting
 - Gauging Point
 - Hydrants
 - Line Meter
 - Pump Stations
 - Reservoir
 - System Valves
 - Water Main
 - Abandoned Water Valves
 - AbandonedWaterPipe
- Boundaries**
 - MRU
 - DMA
 - DMZ
 - Supply Zone
 - Business Area
 - School
 - Barangay
 - Subdivision
 - POI
 - Municipality
- Orthophotos**
 - Platform
 - Elevation

278181.63286939834 1625450.0880209042



Benefits

- 💧 Process Proficiency
- 💧 Cost Savings
- 💧 Data Security
- 💧 Increased Data Accuracy
- 💧 Analytics

Thank You!