



# 2023 Pickering and Darlington Nuclear Groundwater Monitoring Program Results

DNHC Update | September 2024



ONTARIO **POWER**  
GENERATION



# Annual Program Objectives

- Verify groundwater flow direction
- Monitor changes to on-site groundwater quality to identify new issues in a timely manner and assess historical issues
- Monitor groundwater quality at the site boundary to confirm there are no off-site impacts



# PN | Program Overview





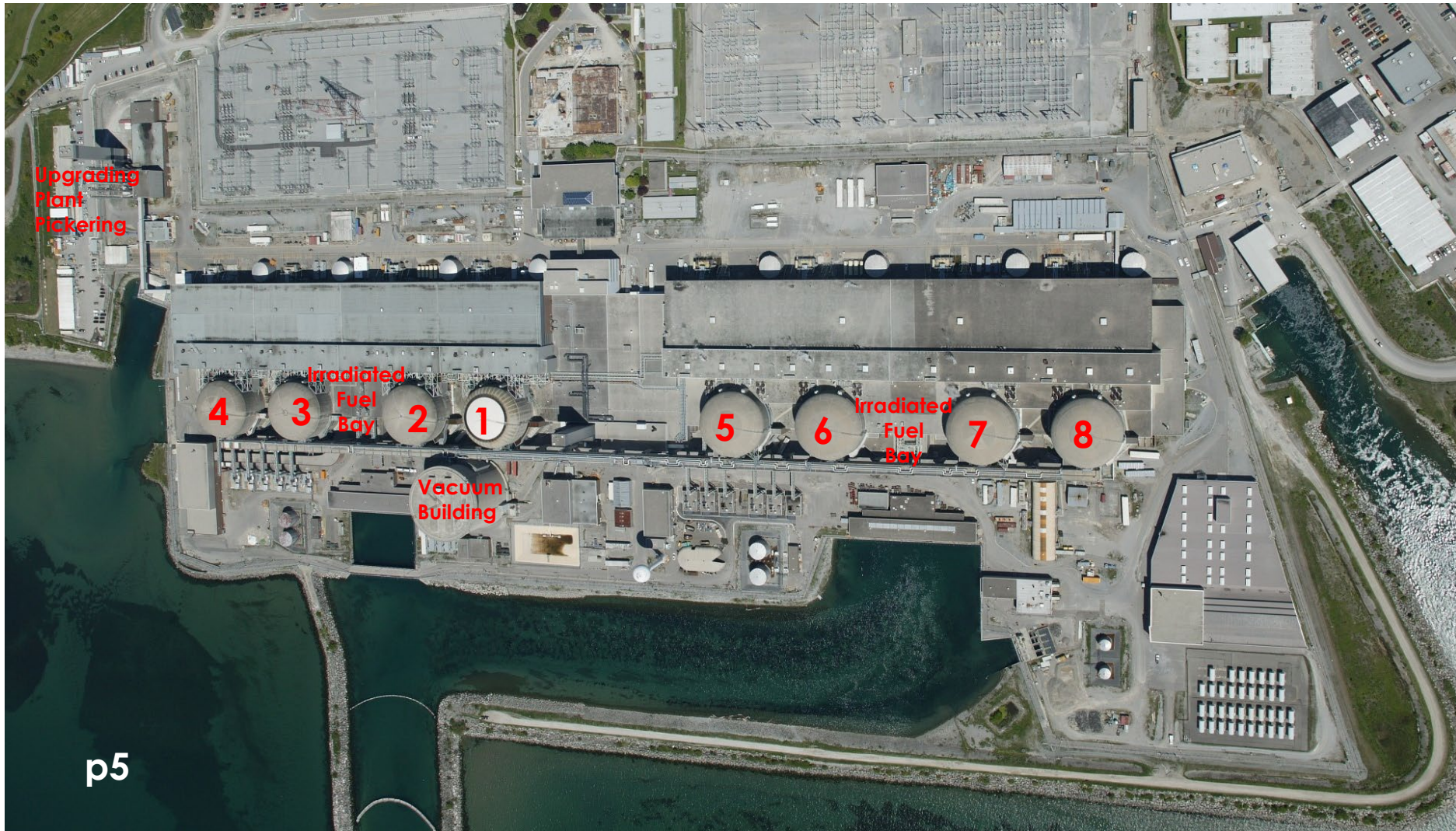
# PN | Groundwater Flow Direction





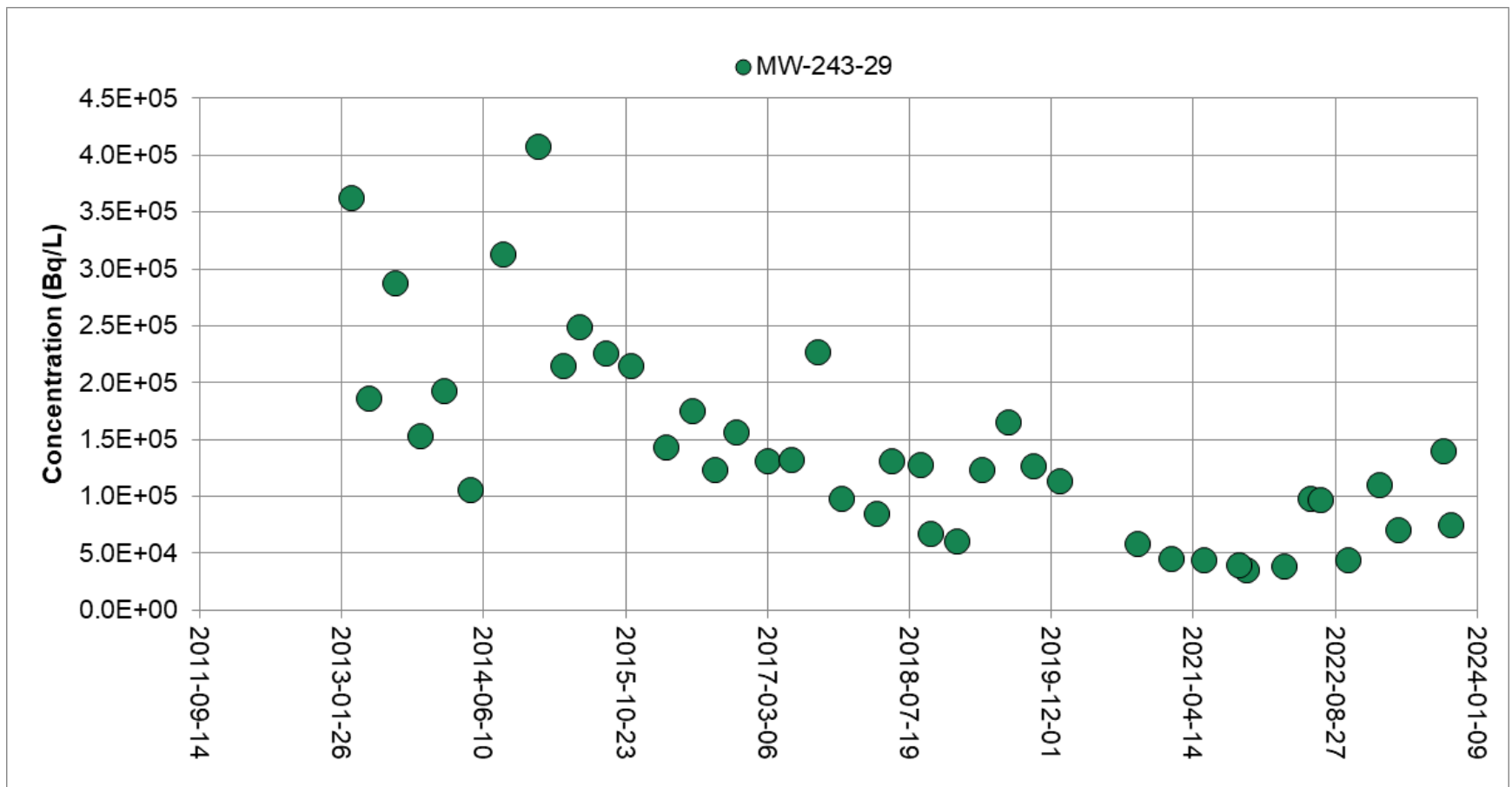
# PN | Groundwater Quality

Key Areas Monitored



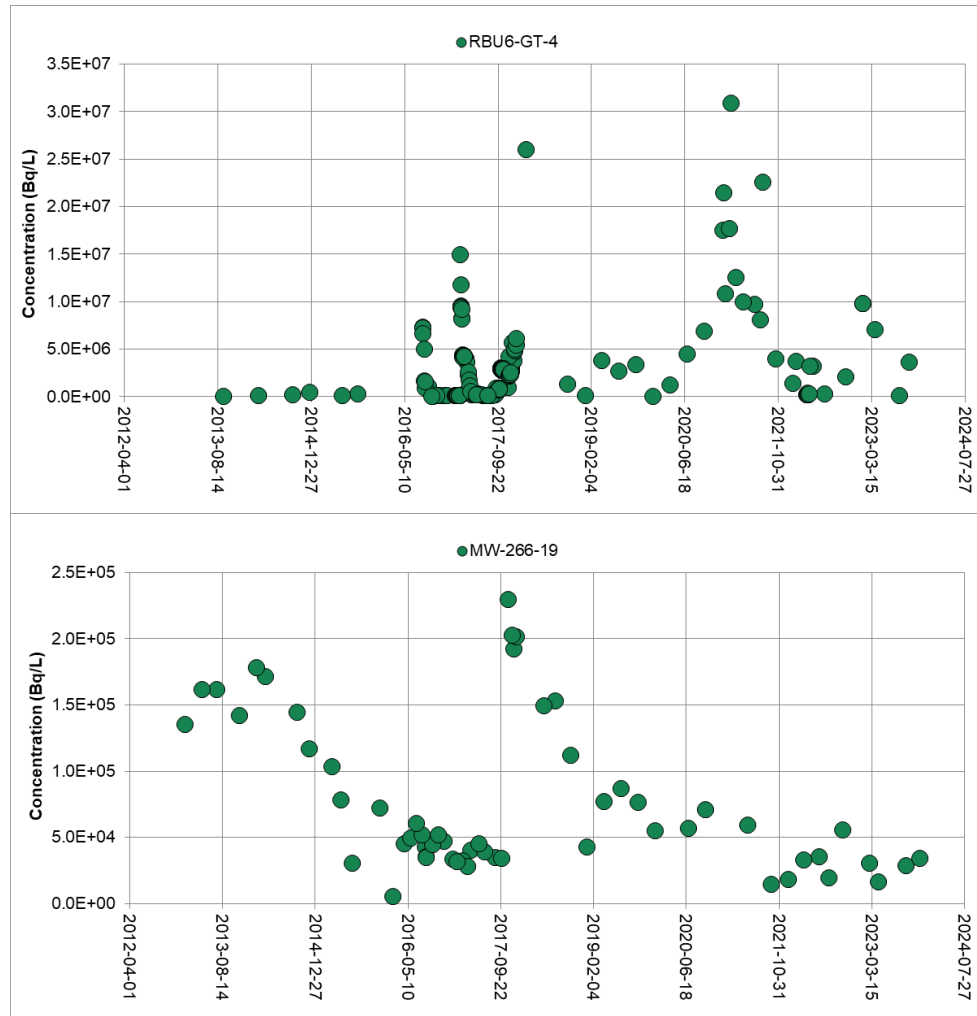
# PN | Groundwater Quality

Unit 3 and Unit 4 Areas



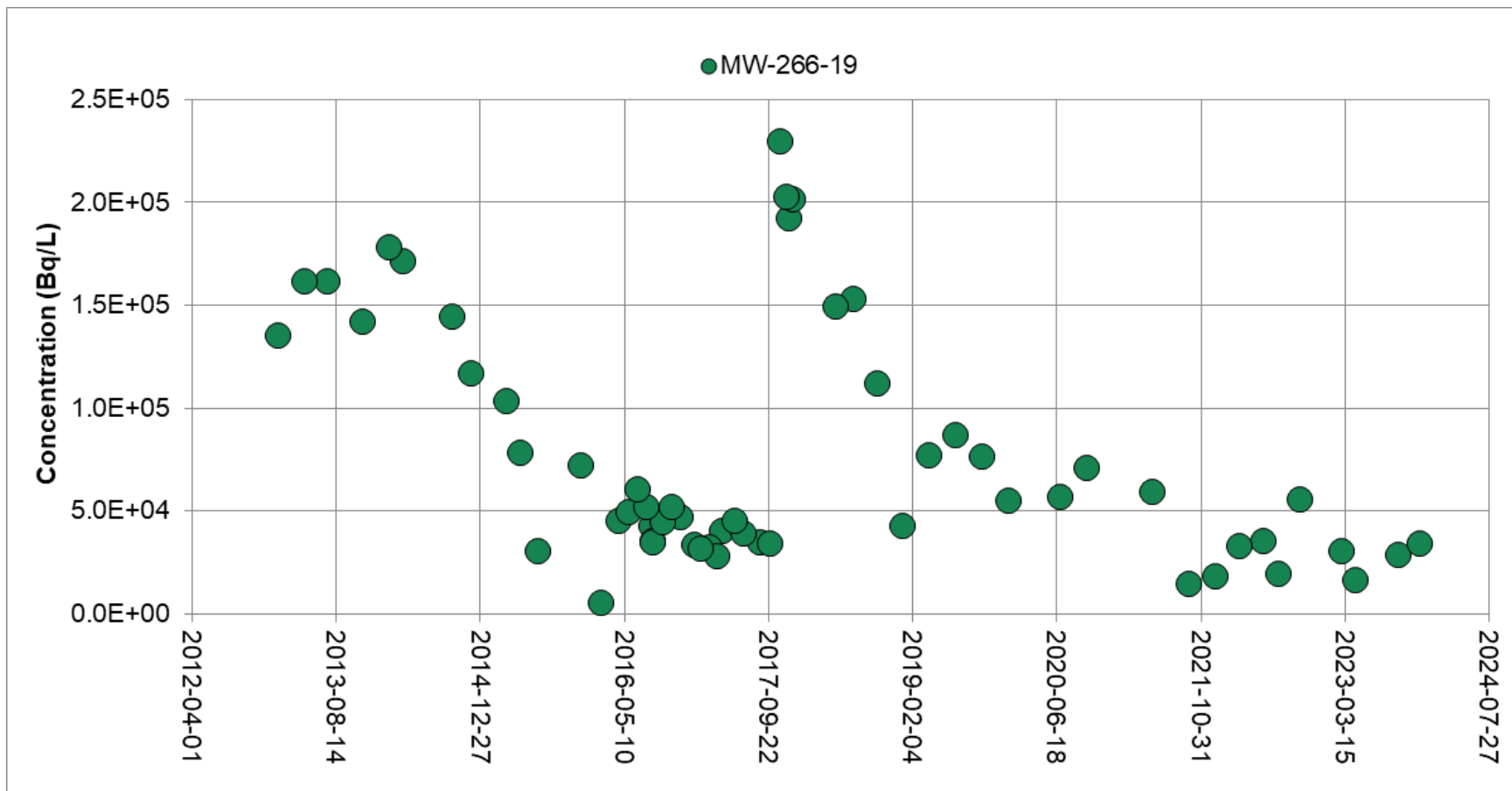
# PN | Groundwater Quality

Unit 5 and Unit 6 Areas



# PN | Groundwater Quality

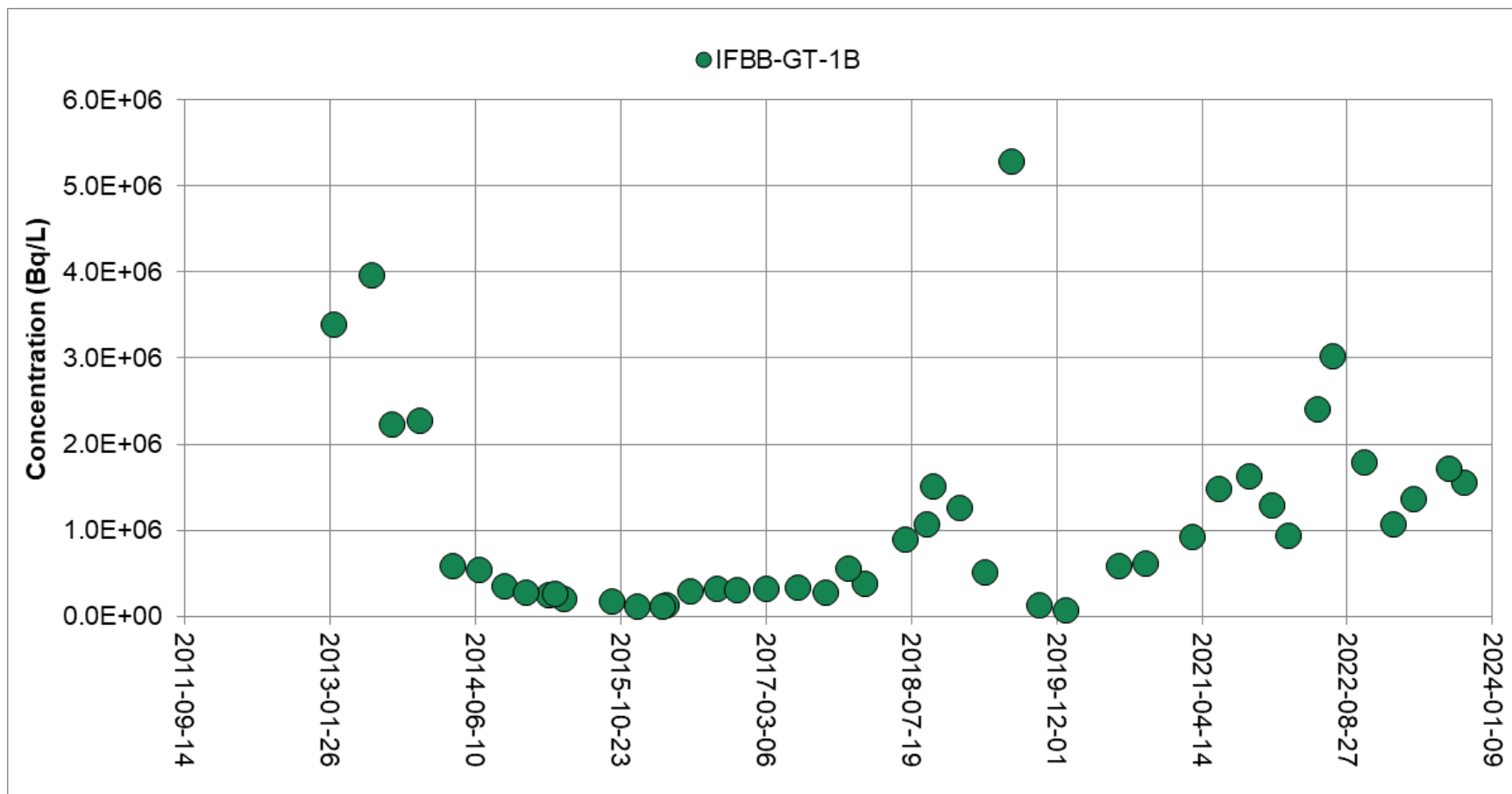
Unit 5 and Unit 6 Areas





# PN | Groundwater Quality

Unit 5 – 8 Irradiated Fuel Bay Area

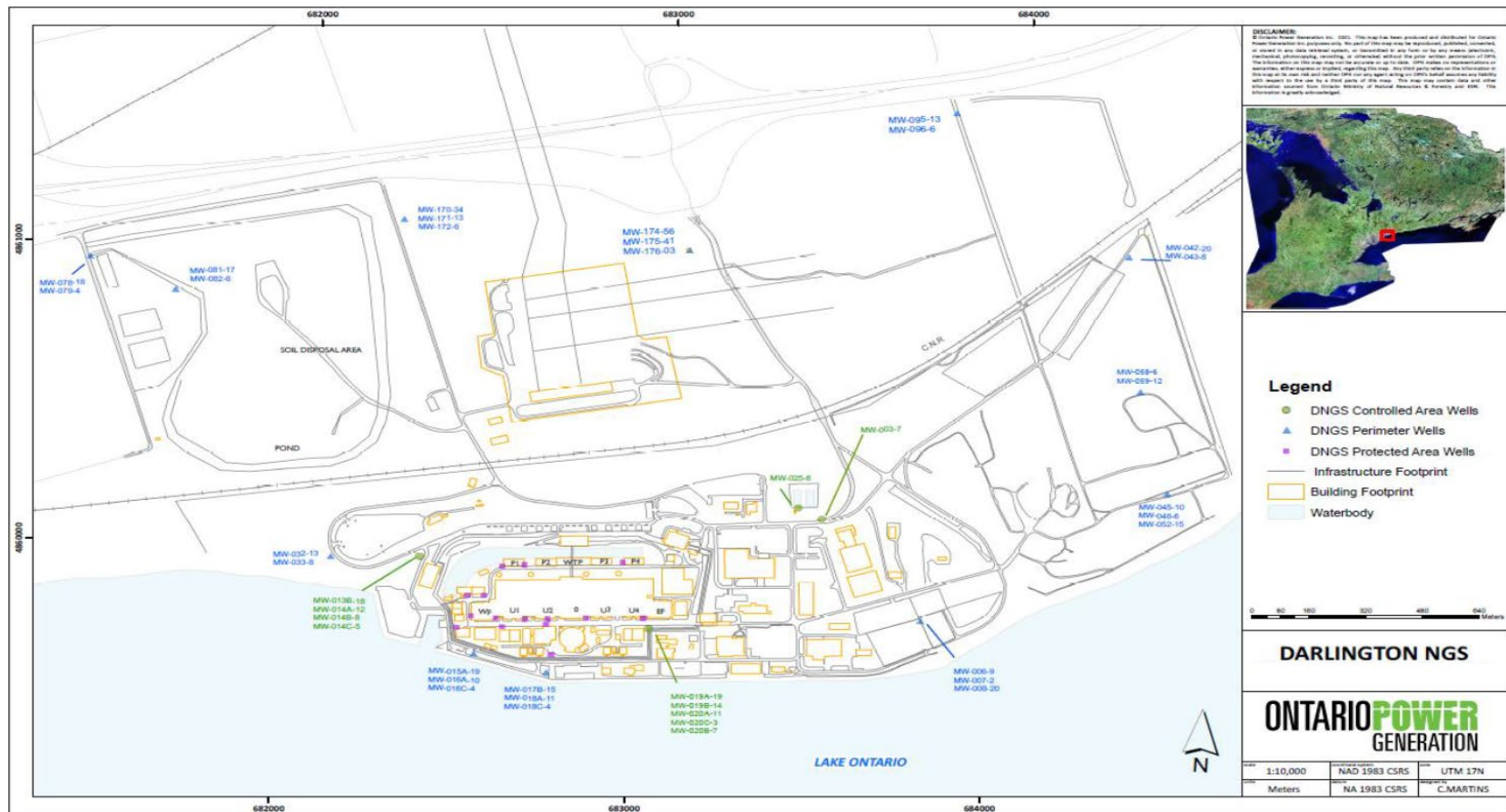


# PN | Site Boundary Groundwater Quality





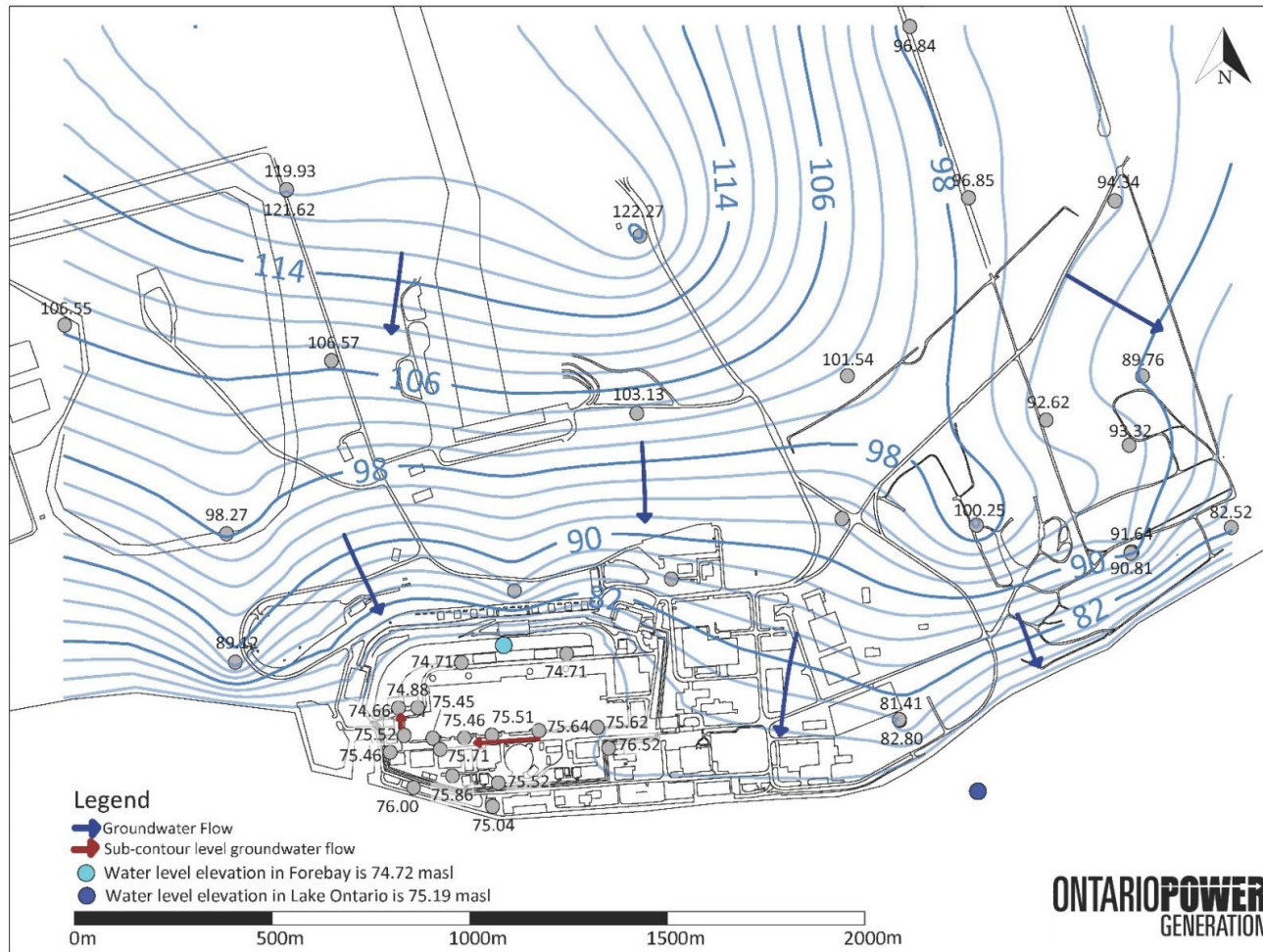
# DN | Program Overview



✓ 62 sampling locations

✓ 139 samples

# DN | Groundwater Flow Direction





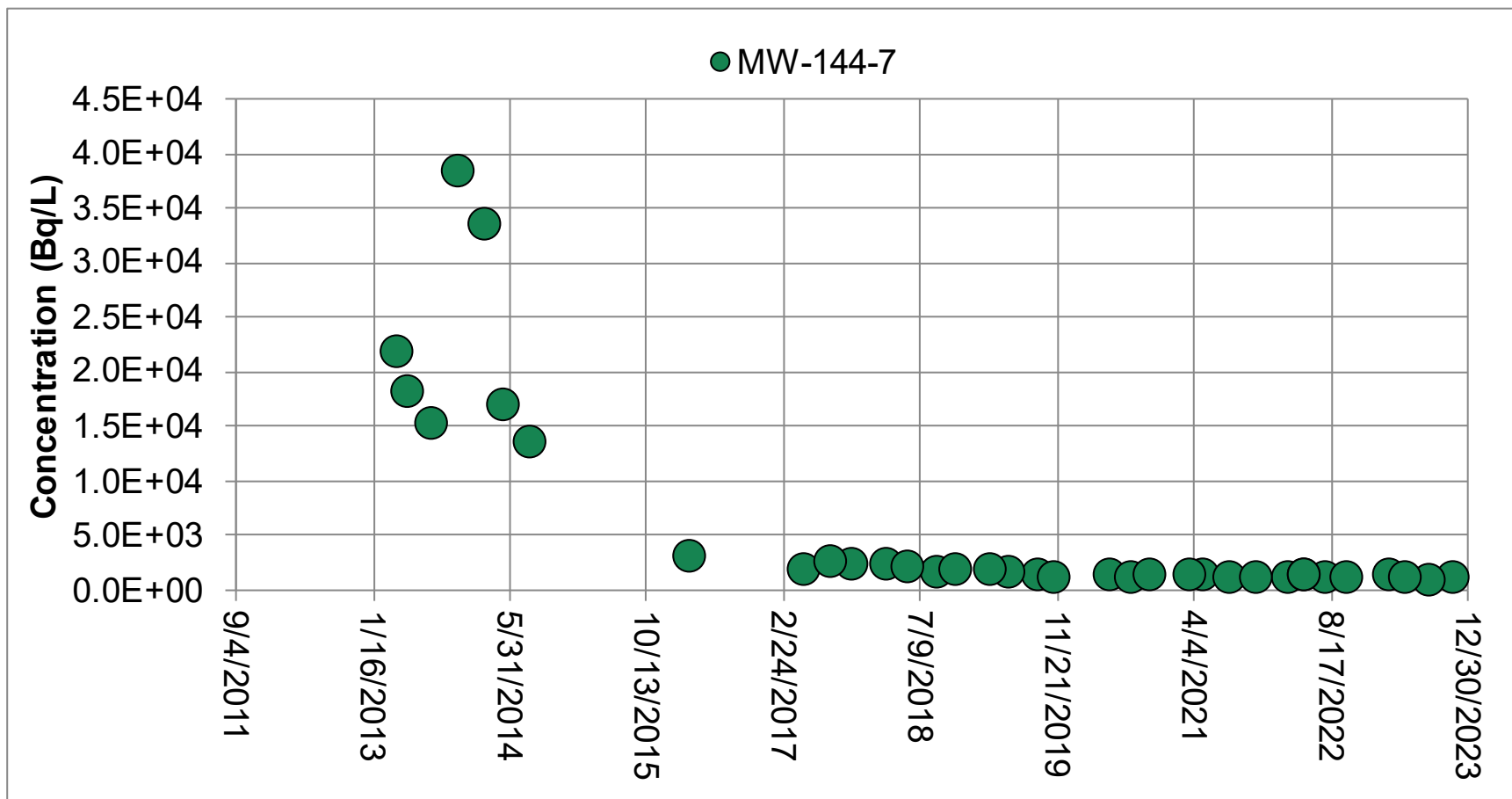
# DN | Groundwater Quality

Reactor Building Area



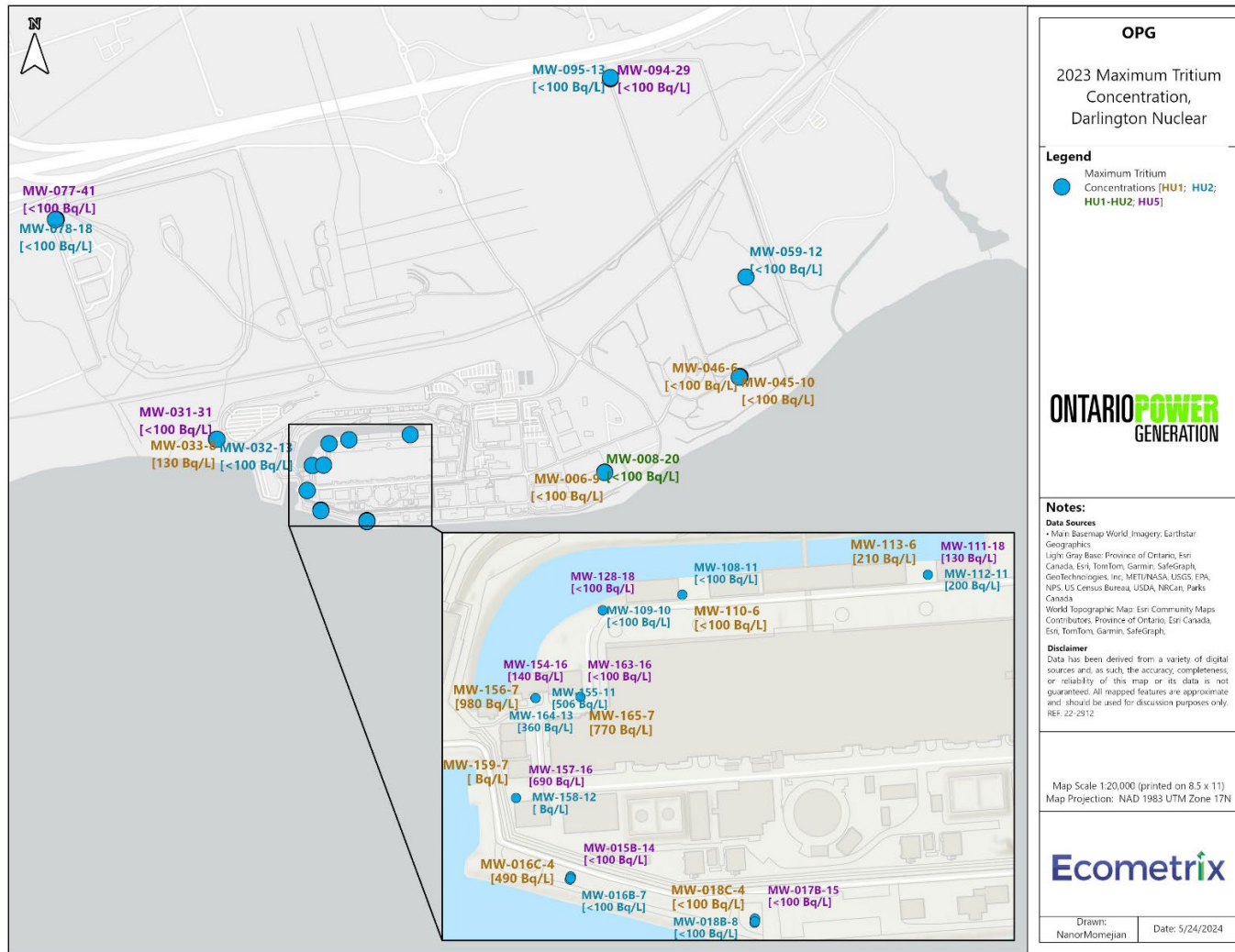
# DN | Groundwater Quality

Reactor Building Area





# DN | Site Boundary Groundwater Quality





## 2023 Summary

- For both Pickering Nuclear and Darlington Nuclear, the groundwater flow patterns remain consistent with original interpretations.
- Groundwater data collected from the key areas remained stable, which indicate consistent environmental performance.
- There were no indications of off-site impacts from PN and DN groundwater

**Groundwater reports and GIS Maps are available at [opg.com](https://www.opg.com).**



Questions ??