

Water Quality



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Quality Control Objective

Protect receiving water bodies from water quality degradation that may result from development and urbanization



Water Quality Criteria

- *the MOE SWMPD Manual regulates water quality treatment levels corresponding to the removal of a percentage of total suspended solids from runoff prior to discharge to the receiving water body.*

CRITERIA:

- ***All watercourses and water bodies (e.g. Lake Ontario) within CVC's and TRCA's jurisdiction are classified as requiring an Enhanced level of protection (80% TSS removal).***

Additional Water Quality Requirements

It is important to note that this criterion represents a minimum requirement that may be superseded by the results of additional studies and/or municipal and provincial requirements.

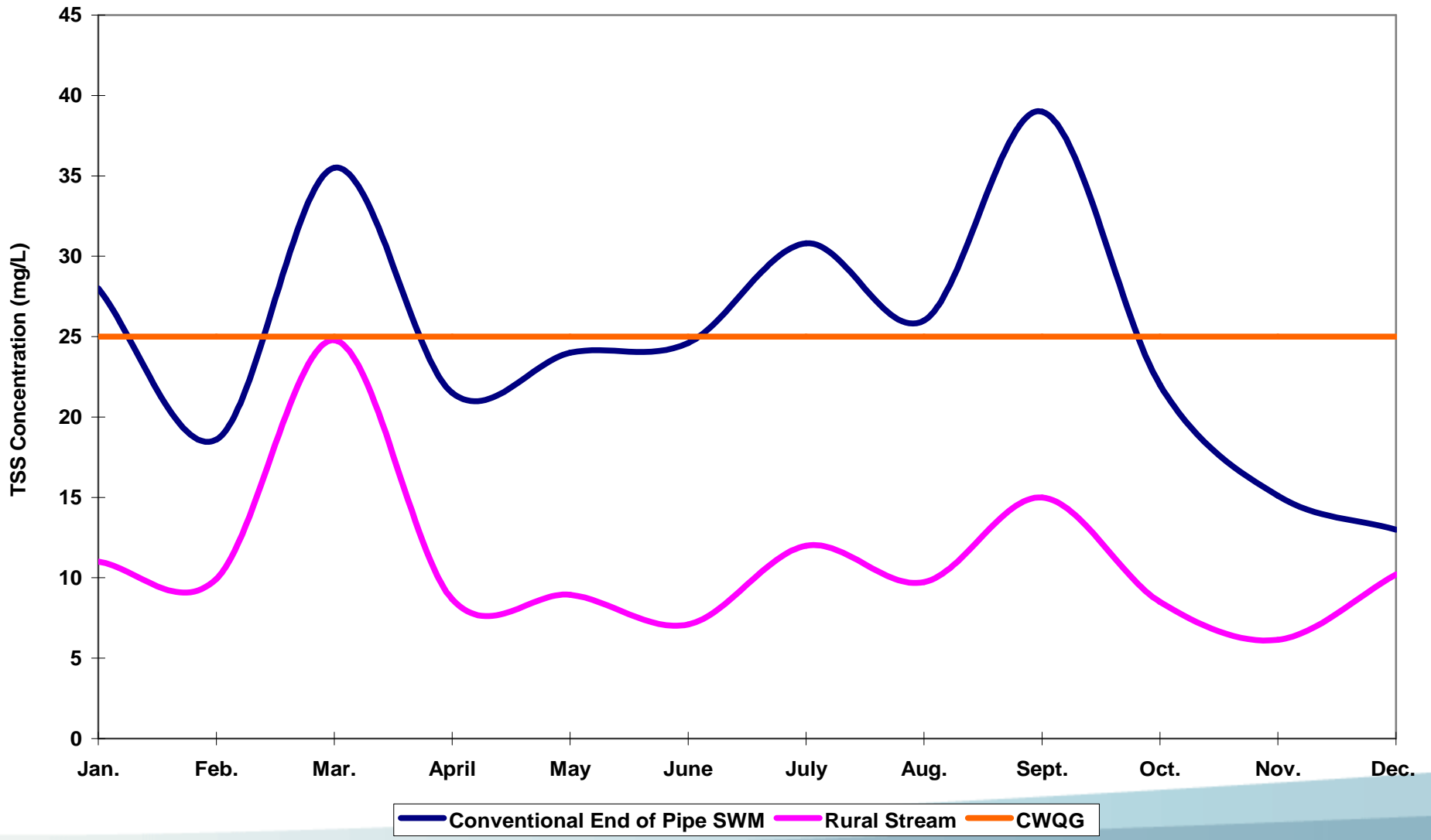
Examples:

- Bacteria Discharges to Lake Ontario (TWWFMG)
- Additional Phosphorus removal to Lake Wilcox
- Stormwater effluent temperatures targets for discharging to reaches occupied by endangered species Redside Dace



Total Suspended Solids

Monthly 75th Percentile (1994-2009)



Particle Size Distribution

Literature reveals that end-of-pipe facilities are less effective in removing finer particles

Data suggests that finer particles tend to have substantially higher associated phosphorus concentrations than larger particles.

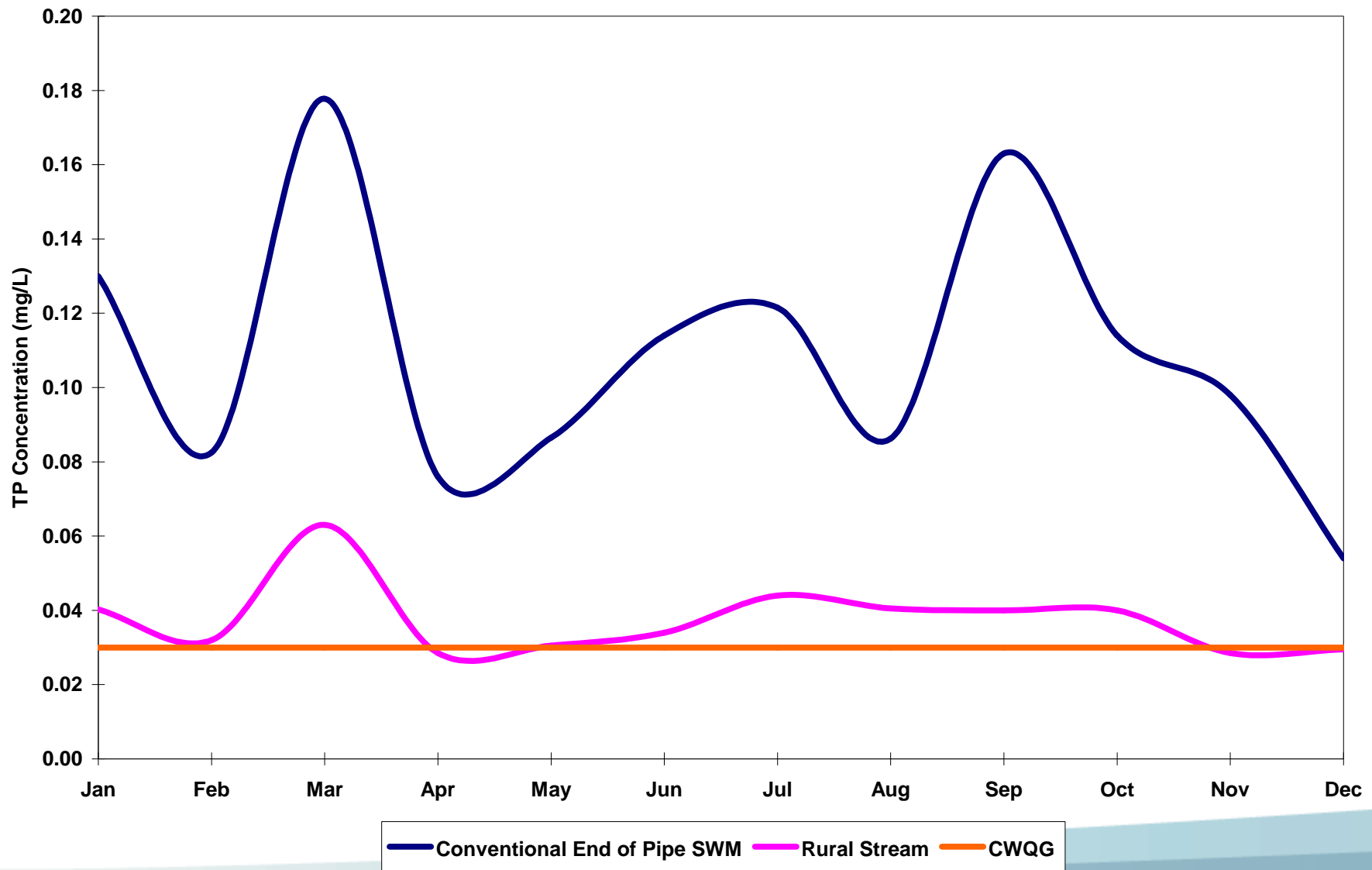


Runoff
treated
from SWM
Pond



Total Phosphorus

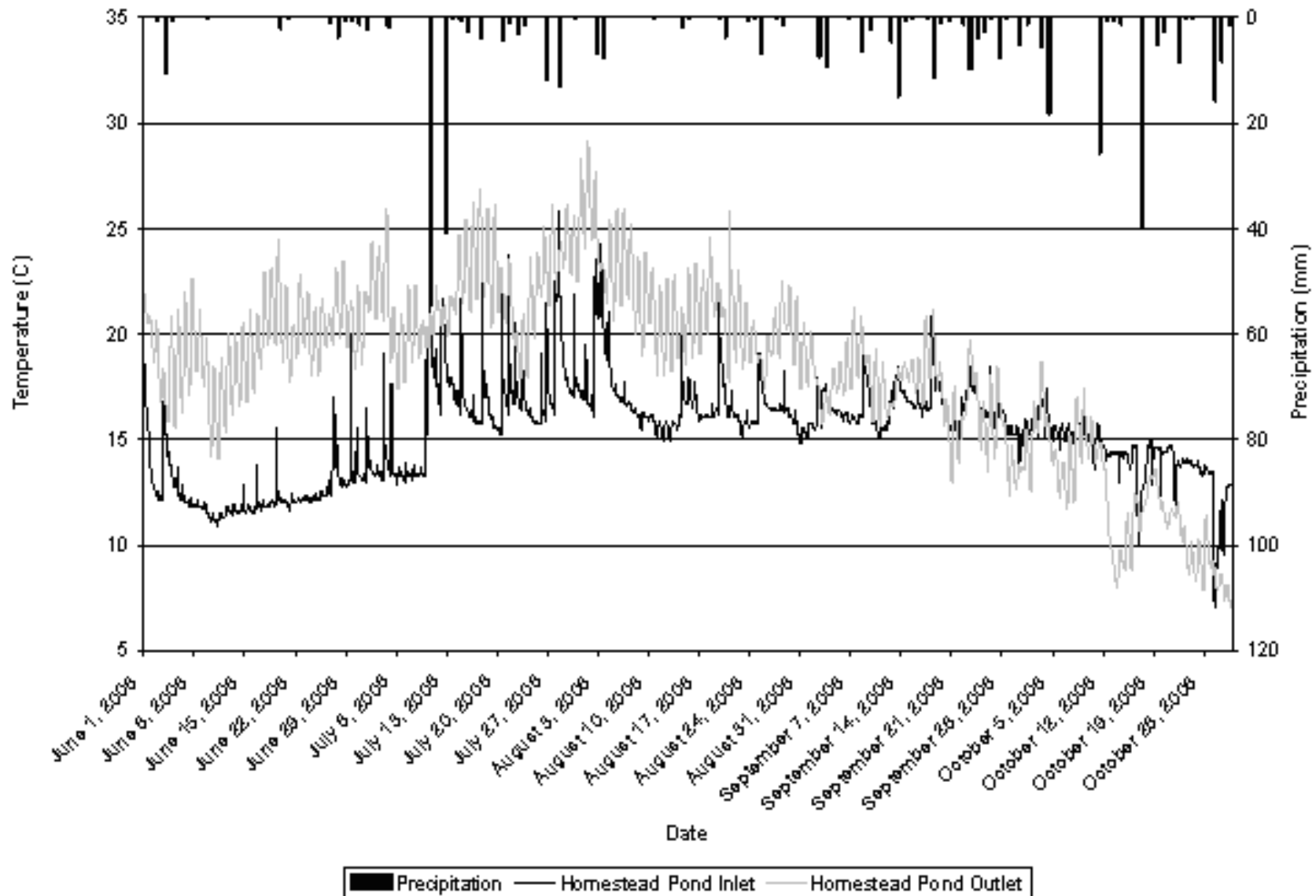
Monthly 75th Percentile (1975-2009)



Consequences of Elevated Nutrients and Temperature in Watershed



Water Temperature



QUESTIONS?

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