If this information is required in an accessible format, please contact 1-800-372-1102 ext. 3560.



Environmental Services Works Department

Open House Objective

- Introduce new branch structure and team leads
- Provide overview of divisional responsibilities
- Summarize the projects and programs in the 2024 approved budget
- Provide overview of procurement process of selecting Consultants



Who we are

- 9 Divisions approximately 350 staff
- 705,000 service population
- 6 Water Supply Plants
- 8 Well Systems
- 11 Water Pollution Control Plants
- 120 Vertical Facilities
- 2600km of watermains
- 2300km of sanitary sewers



Mandate

• Providing safe drinking water & protecting the water environment

What's changed

- Unprecedented Growth
- Stricter Regulations
- Aging Infrastructure
- Technology
- Workplace



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Restructuring Strategic Objectives

- Clarify roles and redistribute responsibilities to align priorities
 - Build scale in the branch to support the growth of the Region
- Develop and maintain a sustainable workforce
- Maintain compliance and public trust
- Align with future Works Dept. Re-org.

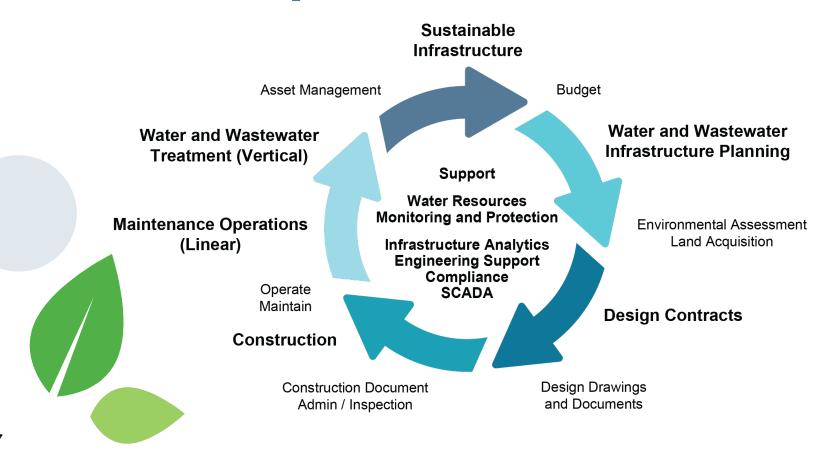
Divisions

Water and Wastewater Infrastructure Planning Manager Nathaniel Andres Water Resource Monitoring and Protection Manager Tavis Nimmo Sustainable Infrastructure Manager Ben McWade

Design Contracts Manager Mike Harris SCADA Manager Tyler Wilson Compliance Manager Ian McIlwham

Infrastructure Analytics Manager Joe Green Water and Wastewater Treatment Manager Rich Tindall Engineering Support Manager Sorin Manta

Capital Contracts





Division Water and Wastewater Infrastructure Planning Manager Nathaniel Andres



Water and Wastewater Infrastructure Planning Lead Responsibilities

- Class EA's
 - Climate change adaptation and resilience
 - Envision
- Development Reviews
- Land Use Compatibility Studies
- Employment Land Servicing Initiative
- Development Charges Background Study
- Water and Wastewater Projections and Expansion Schedule
- Water and Wastewater Master Plans
- Biosolids Master Plans
- Design Reviews Transportation Design and ESDC
- Design Reviews Corporate Real Estate (Protect Future Infrastructure)
- Inflow and Infiltration studies
- Basement Flooding Studies and Solutions (Proactive)



2024 Approved Budget Projects/Programs

- Expansion of Corbett Creek WPCP Environmental Assessment
- Expansion of Courtice WPCP Environmental Assessment
- Expansion of Bowmanville WSP Environmental Assessment
- W&WW Master Servicing Plan*
- Biosolids Master Plan Update



Division Sustainable Infrastructure Manager Ben McWade



Sustainable Infrastructure Lead Responsibilities

- CCTV inspection program
- Sewer jetting program
- MH rehab (ream and seal / grouting)
- Sewer lining
- Watermain lining
- Culvert lining
- Watermain swabbing
- Cathodic protection
- Depot material tenders (parts for water/sewer/hydrants)
- Hydrant painting tenders
- Septage receiving station management
- Bulk water station management
- SCADA service contracts (i.e.: Annual WAN Tower Inspection Reports)
- Annual dam inspection



Sustainable Infrastructure Lead Responsibilities

- Pringle Creek Bridge and Corbett Creek Bridge / Sanitary Sewer Inspection
- Annual inspections of diesel generators
- Annual inspection of fuel tanks at wells related to Source Protection requirements
- Gravity sewer inspection software
- Linear Condition Assessments (watermains, sewers, VCs, forcemains, MH's)
- Vertical condition assessments (WPCP, WSP, elevated tanks, reservoirs, wells, pumping stations)
- Condition assessment of intakes and outfalls
- Streambank Infrastructure Hazard Monitoring Program
- Canadian Infrastructure (W/WW) Benchmarking Initiative
- Capital Budget and Forecast



Sustainable Infrastructure Lead Responsibilities

- Asset management reporting
- Review and inspections of drop structures, siphons, SSPS overflows
- Design Reviews
- Infrastructure failure analysis, criticality and risk assessments
- Arc flash studies
- Basement flooding and Ex-Gratia claims
- MH exemptions for development applications
- Product review lead



Division Design Contracts Manager Mike Harris



Design Contracts Lead Responsibilities

- Preparation of RFP's for Consultant assignment, RFP evaluation and project management
- Construction Contract document preparation:
 - In-house designs; or
 - Consultant assignments
- Capital Contract construction support

Co-Lead Responsibilities

- Excess Soil Management Working Group representation for Environmental Services Capital Contracts (O.Reg 406/19)
- Capital Contract Master Spec document maintenance
- Design Guideline and Standard Drawing Maintenance



Design Contracts

Other Lead Responsibilities

- Railway crossing McKay Road near Duffin Creek WPCP
- Fire Flow Testing
- Well Interference Lead Capital Projects
- AutoCAD Licensing for all of Works
- BIM Standard for Env Services
- Site Service Plans Service Applications
- Design Reviews Municipal Consent Applications
- Climate change adaptation and resilience (retrofit)
- Technical support for Operational Divisions (Plants and Linear)
- High/Low pressure complaints / inquiries/ investigations



Design Contracts

Where Projects come from:

- SI and/or WWIP Division
- ESDC adds projects based on Operational needs, discovered deficiencies, customer issues
- Local Area Municipalities
- MTO
- Metrolinx
- Other Agencies and/or Authorities



Design Contracts Construction Phase Involvement

Construction Support - Linear Contracts

- RMD Construction Services (CS) <u>lead</u> Contract Administration with a dedicated Project Team
- Design Contracts and Consultant Designers support the CS team with submittal reviews, meeting attendance, periodic site inspection, design continuity and by assisting the projects by applying Regional Policies and Procedures as required

Construction Support – Vertical Contracts

- RMD Construction Services (CS) <u>oversee</u> Contract Administration with a Project Team
- Consultants typically provide full-time Project Manager, Contract Administrator, Inspector(s) and other specialty support staff as required
- Design Contracts and Consultant Designers support the CS team with submittal reviews, design continuity and by navigating Regional Policies and Procedures



Design Contracts Anticipated Formal RFP Opportunities for 2024

Vertical Contracts

- RFP-1083-2023 Ajax WSP Expansion / Harwood WPS Upgrades – Closes Feb 15 2024
- Beaverton WSP Upgrades Summer 2024
- Nonquon WPCP Replacement of Tertiary Filter Summer/Fall 2024
- Various Water Pumping Station Improvements
- Various Municipal Well Replacements*
- Various RFP's to bid through RFPQ's 1083-2021 (5), 1090-2021 (2) and 1011-2022 (3)



Design Contracts Anticipated Formal RFP Opportunities for 2024

Linear Contracts

- Bowmanville Zone 1 900mm Feedermain (Lambs Rd / Concession Rd 3, ~3.5km length) & Whitby Zone 1 1200mm Feedermain (South Blair / Watson / Galt / Grand Trunk Streets, ~1.7km length) - Winter 2024
- Oshawa Zone 4 900mm Feedermain (Ex Harmony Rd Z4 PS to Future Winchester Rd Z4 Res. 3.2km length) - Winter / Spring 2024
- SW Courtice Feedermain and Sanitary Servicing (Baseline Road, Trulls Road to Prestonvale Road and Prestonvale Road, Baseline to ~1.0km North) - Summer 2024
- Jackson Ave Trunk Sanitary Sewer Diversion, Oshawa Fall 2024



Division Infrastructure Analytics Manager Joe Green



Infrastructure Analytics

Lead Responsibilities

Energy & GHG

- Energy Management and Reporting (W&S and Facilities)
- Incentive Application and Project M&V
- Power Monitoring/Sub-metering
- GHG Emissions Management and Reporting (W&S)
- Resource Recovery (Energy)
- Class A Account/Peak Demand Management
- LDC, Enbridge and IESO Engagement

GIS/Data Systems

- Data Management, Dashboards and Works Data Viewer
- Open Data/Data Sharing Agreements
- GIS Digitization and Visualization (Water/Sani/Storm)
- Depot Operations Mobile Inspection Programs
- Operations Maintenance Mapping (Winter Maintenance, Jetting, Flushing, Road Patrol, etc)
- Locates/OneCall Data
- Drone/UAV Operations



Infrastructure Analytics Lead Responsibilities

Modelling

- Distribution Hydraulic Modelling/Calibration/Optimization
- Operational/Construction Support
- Water Efficiency/Lost Water Reporting
- Pressure Transients
- Smart Cities Technology (Pilots)
- Envision (Data Management and Efficiency)



Division Water Resource **Monitoring and Protection** Manager **Tavis Nimmo**



Water Resources Monitoring and Protection Lead Responsibilities

- Water Quality or Watermain Break Complaints / Inquiries
- Wastewater Surveillance Initiative
- Industrial Wastewater Monitoring
- Sewer Use By-Law Enforcement
- Public Educational Programs and Tours
- Emerging Drinking Water Threats (Investigative)
- LOWQFS
- REL
- Sampling and Regulatory Reporting
- Backflow Prevention Program
- Water and Wastewater Regulatory Reporting
- Lead Service Replacement Program
- Drinking Water Sample Planner Implementation
- Western Durham Nearshore Monitoring Program



Water Resource Monitoring and Protection Lead Responsibilities

- Spills Sampling and Monitoring
- Source Water Protection
- Water Quality Monitoring and Trending
- Contaminant Management Plans (OP)
- Hydrogeological Studies
- Planning Reviews (i.e., Sub-watershed studies)
- PTTW Applications and Reporting
- Hydrogeological Design Support
- Groundwater Monitoring Program and Data Management
- Oak Ridges Moraine Groundwater Management Program
- Road Occupancy Permits Environmental Reports
- Well Drilling / Upgrades as Capital Projects
- Development of a Well Maintenance Program



Division **SCADA**

Manager
Tyler Wilson



SCADA Lead Responsibilities

- SCADA Master Plans
- SCADA Standards
- Design Contracts (SCADA)
- Justification Analysis and Engineering Reports
- Technology Innovation/Pilot Projects
- Construction Contract Support (FAT, SAT, Change Orders, Integration, Commissioning)
- Project Handover SCADA Training (process, operations, O&M manuals, troubleshooting
- SCADA Cybersecurity
- Manage SCADA System/Network Administration (Integrity, Availability and Security)
- Patches/Firmware Upgrades (SCADA)
- PLC/HMI programming and system configuration
- Version control and change management programs (software/configurations)
- Data storage and reporting (SCADA)
- SCADA Disaster recovery/system backup planning and
 - programs



SCADA

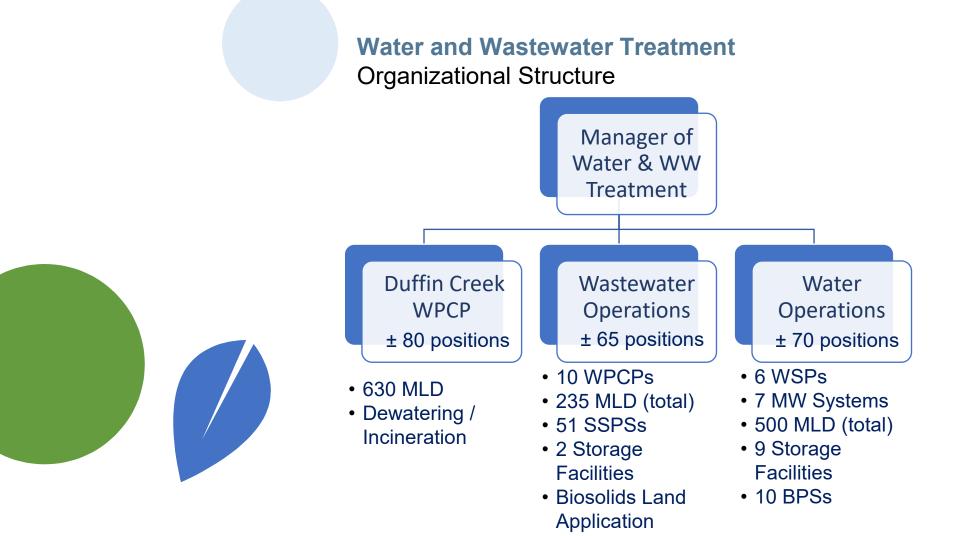
Lead Responsibilities

- Manage SCADA Wide Area Networks (WAN Radios, Freq. Licenses, Towers, Access)
- Manage Windows server and virtual server data centers
- Remote/VPN SCADA services
- 24/7 Emergency & on call response
- SCADA software licensing
- SCADA service level agreements
- SCADA service contracts (i.e.: Annual WAN Tower Maintenance)
- Inventory Management Program (New/spare parts/freeissued, storage- SCADA)
- Document Management Programs (PCN, Drawings, Programs, Standards, Master Plans)
- Electronic Logbook Support
- Workforce Management (Maximo) Support for SCADA led initiatives



Division Water and Wastewater Treatment Manager

Rich Tindall





Water and Wastewater Treatment Lead Responsibilities

- Lake Ontario & Simcoe based Water Supply Plants O & M
- Groundwater based Municipal Well Supplies O & M
- Drinking Water Distribution System Storage & Pumping O & M
- Wastewater Treatment Facilities O & M
- Wastewater Conveyance System Pumping O & M
- Biosolids Management (Dewatering/Incineration & Land Application Program)
- Emergencies (Water & Wastewater Vertical Facilities)
- Parts Storage/Management
- Vendor Supply & Service Contracts
- Water and Wastewater Data Management/Assessment
- Operations Manuals, Equipment Manuals, PCN, etc
- Electronic Logbooks
- Process & Regulatory Sample Schedulers/Planners
- Computerized Maintenance Management System (Maximo)
- CUPE 1785 Bargaining
- Participate in Research and Innovation Initiatives
- Support Continuous Improvement of Treatment Facilities



Division Compliance Manager

lan Mcllwham



Compliance Lead Responsibilities

- DWQMS/ISO
- Exceedance / Non-compliance Reporting
- Health and Safety
- Regulatory Inspections and Reports
- Legislative Support
- MECP PTTW / EASR Construction Dewatering Reporting
- MECP ECAs Tracking
- Standard of Care Training
- Strike Contingency Planning
- Brock West Landfill annual report
- Auditing CVOR program for MTO
- Env. Can. reporting and followup
- Pollution Prevention Plans (Env. Can.)
- Environmental Emergency Plans (Env. Can.)
- Env. Can. Incineration Survey



Compliance Lead Responsibilities

- TSSA inspection, reporting and variances
- Administrator MECP Environmental Permissions Portal
- ESA deficiency reports
- Administrator MECP Water Taking Reporting Portal
- Emergency Management
- Transport Canada (lagoon boat)
- Transfer of Review Program agreement and annual report
- Business Continuity
- Regulatory Training
- National Critical Infrastructure Assurance Program
- Training/Developing Staff
- On-Boarding and Documentation
- Risk Assessments
- Spills Coordination (Lead)



Division Engineering Support Manager Sorin Manta



Engineering Support Lead Responsibilities

- Capital Contract Construction Support
- Capital Contract Handover Training (process, operations, O&M manuals, troubleshooting, health and safety, etc.)
- Technical Document Management (Calculations, TM's, Reports, Schematics, Model, etc.)
- Non-Capital Project Delivery
- Research
- Pilot Projects / Innovation / Optimization
- Envision (Vertical Construction and Operation)
- Developing Engineers

Branch

All divisions have the following responsibilities:

- Water and Wastewater Advocacy
- Service Durham (311) Support
- Innovation
- Developing and maintaining Strategic Divisional Business
 Plans
- Document Management for Divisional Projects/Programs
- Supporting Corporate Diversity, Equity and Inclusion Initiatives
- Council Reporting and Support
- Providing Specialized Divisional Tools and Equipment
- CUPE 1764 Bargaining
- Chairing regular MECP Directors and Local Branch Meetings
- Design Guidelines and Product Review Committees
- Conservation Authority Support
- Participate with various Organizations (OWWA, WEAO, OPWA, AMO, PEO, OSPE, RPWCO, CCPPP, OMWA, FCM,CWN etc.)



Finance Department Purchasing Management Team

Karen Chatten Pradeep Sekhon Silvia Iturriaga

Procurement - Selecting Consultants



Hiring consultants

- Formal competitive RFP process (Over \$100K)
 - User department create the scope of work and evaluation criteria.
 - The Region advertises RFP using ebidding website "Bids&Tenders".
 - Respondent must submit via "Bids&Tenders".

• Invitational competitive process (Under \$100k)

- User department prepares Request for Proposal (RFP) and solicit proposals by Invitation
- Proposals received, evaluated and awarded to the highest scoring respondent.
- Consulting agreement (CSA) is executed, and Purchase order is issued.

Hiring consultants (Cont'd)

Prequalification/ Roster/ Registry

- High volume of projects/assignments
- Reduced timelines to hire consultants
- Qualified consultants ready to be engaged
- For fixed term/ specific list of projects
- Types of prequalification/roster:
 - Rotational
 - Second stage competitive process
 - Custom/Hybrid approach
- To obtain best value for the Region.

Preparing and Submitting your proposal

- Review the RFP document thoroughly
- Do not assume, Ask questions
 - Ask before you submit your proposal (by the deadline)
- Review timelines indicated in the RFP
- Review the requirements
- Each RFP is unique and will be evaluated solely on its content and the scoring criteria within the document.
- Follow the submission instructions and leave enough time to submit your proposal



What happens with your bid

- Proposals will be evaluated by the departmental stakeholders.
- Highest scoring respondent will be awarded the contract.
- Unsuccessful bidder may reach out to request debrief.
- Debrief is designed to provide feedback



Accessibility Requirements

If selected, you have obligations under:

The Accessibility for Ontarians with Disabilities Act (AODA) - passed by the Ontario Government in 2005 with a vision of a fully accessible Ontario by 2025 and establishes accessibility standards for information and communications, employment, and transportation.

Visit the website of the Accessibility Directorate of Ontario (https://www.aoda.ca/the-accessibilitydirectorate-of-ontario/) for information about the Accessibility for Ontarians with Disabilities Act



Accessible Document Checklist

Ensure your deliverables are fully accessible as per the Region of Durham's guidelines:

https://www.durham.ca/en/livinghere/resources/Documents/Accessibility/Acc essible-documents-checklist-for-vendors.pdf

Questions to:

Accessibility Coordinator - Accessibility@durham.ca

Purchasing - DurhamRegionPurchasing@durham.ca

Thank You