Drinking and Ground Water Trust Fund
Advisory Committee
Presentation on Southern NH
Regional Project

January 18, 2018
Southern NH Interconnection Project

- Primary Objectives
  - Address MtBE contamination of Salem’s Turner Campbell water well aquifer
  - Address MtBE and PFC contamination and supply issues in Windham
  - Address water supply contamination issues in Plaistow
- Status Update
Key Activity Progress

- Development of Project Cost Estimates
- Development of Water Rates and Agreements
- Resolution of Water Quality Issues
Cost Estimation

- Generic Costing Estimates Completed
- Route Finalization
  - Underwood’s options analysis reports (12/22/2017 and 1/9/2018)
  - Pennichuck’s ideas on Windham MtBE/PFCs problems
  - Possible additional supply option evaluation, Haverhill & Methuen
  - Weston & Sampson value engineering analysis
- Equipment and Piping Estimates
  - Water demand projections completed
  - Hydraulic and water age modeling
    - December: Manchester, Derry, HAWC and Plaistow
    - Recent Additions: Salem, Litchfield and Windham; Londonderry soon
  - Additional design basis discussions ongoing
  - Ledge probes complete, except Windham, for current options
Ledge Probes – Complete for Current Options, except Windham
Routes

Haverhill

Methuen
East Derry Route
East Derry Route Topographic Profile

Proposed East Derry Route from Londonderry/Derry town line through Derry, Hampstead, and Atkinson to end of existing Fire Suppression System (FSS) in Plaistow.
Route 28 Option
Route 28 Option Topographic Profile

Proposed Salem Route from Derry Rockingham Road BPS through Derry, Windham, and Salem to end of existing system in Salem.
Current Design/Route Approach

- Target Budget – approximately $30 million
- Phased Approach
  - Route 28 option meets spending target
    - If designed to meet current needs (less than 1 MGD)
    - Links all the target water systems
  - “No Regrets” approach, i.e., added pipe and equipment will meet long term demand projection (3.1 MGD)
  - Second phase will examine low cost approach to additional capacity (Derry upgrades, Haverhill, Methuen, Pennichuck)
Water Agreements and Rates

- Water Rates = Project Affordability/Viability
  - Water Importation Costs
    - Significant progress on rates but not finalized
  - Bonded Costs (Minimal for Phase I)
- Users & Demand
  - Salem & HAWC estimates and seasonality
  - Plaistow Drinking Water Survey
- Legal & Other Issues (Not Fully Addressed)
  - Ownership of pipe
  - Liability during outages
  - Rate increase handling, etc
Water Quality Issues

- Fluoridation Statute
  - Majority vote and referendum when adding fluoridation
  - Manchester fluoridated, Salem/HAWC aren’t

- Disinfection
  - Chlorinated Disinfection (HAWC, Haverhill)
  - Chloramination (Manchester, Salem, Derry)
  - Plans not finalized to harmonize disinfections systems
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