City of Rochester Hills, MI Water Distribution Model Evaluations

Meeting with Community Development April 22, 2004

AGENDA

- Review of Previous Meeting
 - o Benefits of Water Storage (pressure, fire flow, peak demand reduction)
 - o Review of DWSD Rate Structure
 - o Revised reservoir sizing based on actual recorded flow and pressure data
 - o Confirmed reservoir locations (Tienken & Adams, Avon & Rochester)
 - o Evaluated water rate reduction with system storage
 - o Revised project cost estimates
 - o Estimated payback period

DWSD Coordination

- Rochester Hills is first community to request documentation from DWSD related to storage issues
- Resubmitted model to show that there are no impacts to DWSD transmission facilities
 - Worst case maximum day demand conditions
 - Input actual diurnal curve
 - Removed booster pumping station on east side of City
- Translational errors with conversion of modeling data to DWSD model
- o Met with DWSD Engineering and Billing Rate staff
 - Verbal conditional approval of project from DWSD Engineering
 - Requested printouts of tables from model
 - Will provide approval letter no later than May 3, 2004
 - Rate Supervisor will begin drafting letter for approval of language by legal staff, pending receipt of letter from Engineering

Rate Reduction Issues

- Once storage is constructed, historical data used to compute maximum day demand factors will be disregarded
- Typically based on a 4 year average
- o First few years may result in fluctuations in max. day factor
- Important to control max. day demand through water restrictions, etc. during first few years
- o Rate reduction for the reduction in peak hour demand will not kick in until one year after system is in operation































