

North Davis Meadows CSA

**Water System
Consolidation Project**

March 20, 2018

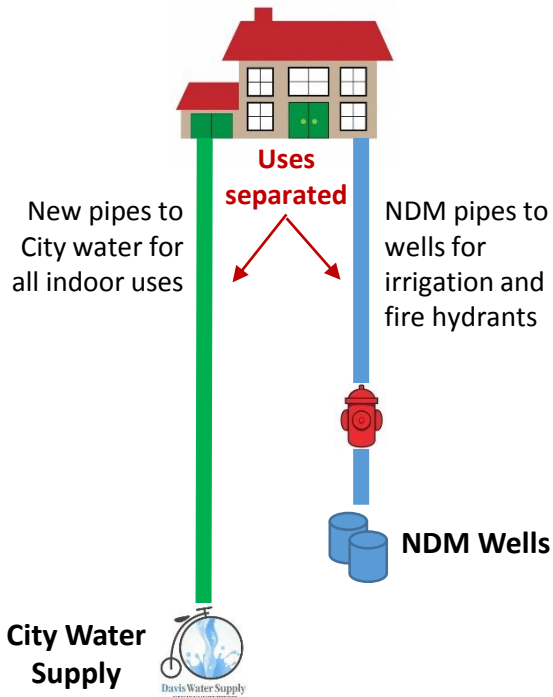
North Davis Meadows Public Water System to date

- Public water system under Compliance Order for nitrates, iron and aluminum
 - Included hexavalent chromium as well; MCL likely to be set again
- Solutions studied
 - New wells, treatment, consolidation with Davis
 - Public meetings held and community input since 2008
- Jun 2015 – Strong support, via survey, for dual-use consolidation with City of Davis
 - Connection to City just for indoor uses
 - Wells still used for irrigation and fire suppression. Note: wells known to be inadequate for fire protection
- May 2016 – Successful Prop 218 to repay a 20-year SRF planning loan
 - Note: no such loan available
- Dec 2016 – Design commenced
- Aug 2017 – Davis Fire Chief strongly recommended all water uses on City system for adequate and reliable fire protection

North Davis Meadows Water Project Options

Scenario 1

Current Plan per 2015 Survey
Dual-Use System with
Fire Protection from Existing Wells



Estimates/Parcel/Year

Project Cost:

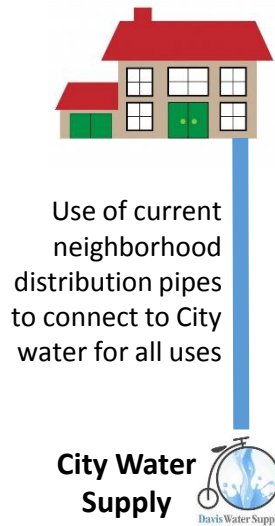
¾": \$5,684 year 1-4; \$3,182 year 5-30
1": \$6,139 year 1-4; \$3,437 year 5-30

Operating Costs:

- Average indoor water charge \$850
- Well operation charge \$1,200
- Costs to repair and replace wells (see pg 3)
- Inspection fees \$100/yr and \$130/3 yrs

Scenario 2

Fire Chief Recommended
All Uses on City Water



Estimates/Parcel/Year

Project Cost:

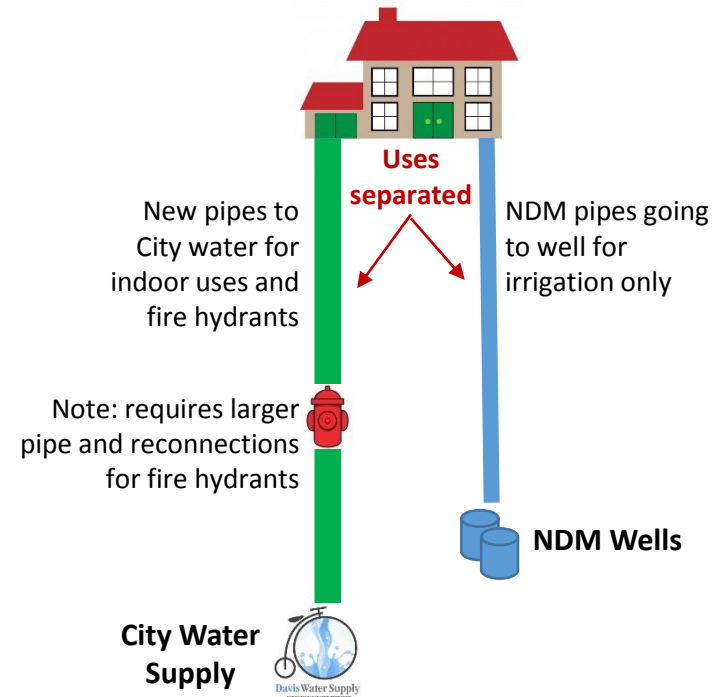
\$3,012 year 1-30

Operating Costs:

- Average charge for all water uses \$3,650 (see pg 4 for more information)

Scenario 3

Minimum Fire Chief Recommended
Dual-Use System with
Fire Protection from City Water



Estimates/Parcel/Year

Project Cost:

\$6,897 year 1-4; \$3,861 year 5-30

Operating Costs:

- Average indoor water charge \$850
- Well operation charge \$1,200
- Cost to repair well(s) (see pg 3)
- Inspection fees \$100/yr and \$130/3 yrs

North Davis Meadows Public Water System to date

- Sep 2017 – Community meeting and outreach
- Sep/Oct 2017 – Strong support, via survey, for all water uses supplied by City of Davis
- Fall 2017 – Additional design commences
- Jan 2018 – Engineering and Rate study complete, community meeting to discuss results, more outreach
 - Increases from rough estimates in fall due to additional engineering; increased construction costs, interest rate, contingency; cost of decommissioning/demolishing wells
- Jan-Mar 2018 – Prop. 218 proceedings to increase Operations Fee to fund project
 - Current fee includes: water, storm drainage management, street lighting, landscaping, CSA administration

Result of An Unsuccessful Prop 218 Proceedings

- Current fee will not reimburse expenses incurred to date:
 - \$430k loan for water project design
 - Plan to be repaid with successful SRF loan application
 - Application can not be submitted until successful Prop 218
 - \$92k loan for sewer deficit
 - Expected to be relieved when residents become direct customers of City for sewer service following water project
 - \$393k in additional engineering and consultants, staff time, CEQA studies required to design project and apply for SRF loan
- Total: \$915,000 plus interest

Result of Unsuccessful Prop 218 Proceedings

- Without a long-term solution in response to Compliance Order:
 - \$X for further study
 - County unaware of other viable solutions
 - \$X increased costs to operate wells
 - City of Davis no longer willing to be contract operator
 - Other contract operators expected to be more expensive
 - \$10-25k to assess wells
 - Will be a requirement of new operators
 - \$X to address known well deficiencies
 - NDM1 well has significant deficiencies
 - \$X staff to determine the Xs above
- Total: \$X

Result of An Unsuccessful Prop 218 Proceedings

- CSA at risk for \$3,000/day fine for no plan to address Compliance Order
 - Could increase to \$4,000/day with new MCL for hexavalent chrome
- Without increase to at least cover expenses to date, County may have to restrict providing CSA services to recoup costs
- Still no potable water or fire protection for community
 - \$3.5-5.5 million for new wells to accommodate fire protection
 - Estimate extrapolated from 2010 Wood Rodgers study
 - Costs include storage tank, emergency generators, site work
- Further delay increases costs to connect to the City of Davis for a reliable source of drinking water and fire protection.
 - Construction costs
 - Interest rate

Staying the Course

- Immediately – Submit draft SRF loan application
 - 6-8 months for their review
- Jul 2018 – RFP for construction management and inspection
- Aug 2018 – Bid call
- Sept 2018 – Bid opening
- Sep 2018 – Final submittal of SRF loan
- Oct 2018 – SRF loan funding agreement
- Oct 2018 – Bid award
- Nov 2018-Mar 2019 – Construction
- April 2018 – Decommission/Demolish wells
- 2019 – Prop 218 to revise Operations & Sewer fees
 - Fees will be reduced with homeowners direct customers of City of Davis for both services

Point of Use/Point of Entry

Treatment devices in lieu of centralized treatment (source: California Health & Safety Code 64418):

- Must prove centralized treatment plant or consolidation is not economically feasible
- Must have 100% participation from residents
- All POU/POE units are owned, operated and maintained by Public Water System
- Must complete pilot testing
- Must have routine access to each house for POU/POE installation, maintenance, water quality monitoring, etc.
- Must address how to handle customers who elect not to participate to POU/POE program
- Must conduct annual inspection to each POU/POE unit to make sure treatment unit is properly operating and has not been bypassed
- Must conduct monthly monitoring on a rotating basis
- No reduced monitoring frequency can be requested
- Timely response has to be ensured for possible failure of each treatment unit
- Easy to put the system into violation