

MEMO

To: Mayor & City Council
From: Bob Sisson, Dir. Public Works
Subject: Layng Creek Water System Facility Plan
Date: 10/25/02

In order to assist you in understanding the differences in the seven (7) alternatives that have been evaluated and included in the Layng Creek water system facility plan, I have prepared the following descriptive summaries. I hope this helps to clarify the details of each alternative. Please note that Alternatives #2 thru #7 retain water service to all existing customers. Only Alternative #1 would discontinue service to certain customers. From a staff perspective the most feasible alternatives are #1 and #4.

SUMMARY DESCRIPTIONS OF THE LAYNG CR WATER SYSTEM ALTERNATIVES

Alternative #1

1. Eliminates all water production facilities at Layng Creek
2. Discontinues water service to all customers east of the Dorena Mobile Home Park (110 customers)
3. All outside-city water customers between the UGB and the Dorena Mobile Home Park (74 customers) would retain service by being backfed by gravity from the City reservoirs
4. Expands Row River WTP facilities by 2 MGD
5. Includes installation of cover on existing 2.3 MG reservoir
6. Phase 1 (improvements over the next 2 to 3 years) Construction cost - \$3,900,000
7. Single family residence rate impact - \$3.88/month

Alternative #2

1. Eliminates all water production facilities at Layng Creek
2. Expands Row River WTP facilities by 2 MGD
3. Continues water service to all existing customers
4. All outside-city water customers along the transmission line would be backfed from the City reservoirs by a combination of gravity and/or through pumping stations
5. Transmission line would be replaced **
6. Includes installation of cover on existing 2.3 MG reservoir
7. Phase 1 (improvements over the next 2 to 3 years) Construction cost - \$8,455,000
8. Single family residence rate impact - \$10.03/month

Alternative #3

1. Constructs new 2 MGD Layng Creek WTP with slow sand filter technology
2. Continues water service to all existing customers
3. Consolidates new WTP facilities on single site where filters currently exist
4. Constructs new 0.74 MG water reservoir in Culp Creek area
5. Land acquisition would be required for construction of WTP and new reservoir in Culp Creek area
6. Transmission line would be replaced**
7. Includes installation of cover on existing 2.3 MG reservoir
8. Phase 1 (improvements over the next 2 to 3 years) Construction cost - \$6,195,000
9. Single family residence rate impact - \$6.64/month

Alternative #4

1. Constructs new 2 MGD Layng Creek WTP with rapid sand filter technology
2. Continues water service to all existing customers
3. Consolidates new WTP facilities on single site where filters currently exist
4. Constructs new 0.74 MG water reservoir in Culp Creek area
5. Land acquisition would be required for construction of WTP and new reservoir in Culp Creek area
6. Transmission line would be replaced**
7. Includes installation of cover on existing 2.3 MG reservoir
8. Phase 1 (improvements over the next 2 to 3 years) Construction cost - \$6,360,000
9. Single family residence rate impact - \$6.85/month

Alternative #5

1. Constructs new 2 MGD Layng Creek WTP with cartridge filter technology
2. Continues water service to all existing customers
3. Consolidates new WTP facilities on single site where filters currently exist
4. Constructs new 0.74 MG water reservoir in Culp Creek area
5. Land acquisition would be required for construction of WTP and new reservoir in Culp Creek area
6. Transmission line would be replaced**
7. Includes installation of cover on existing 2.3 MG reservoir
8. Phase 1 (improvements over the next 2 to 3 years) Construction cost - \$6,960,000
9. Single family residence rate impact - \$7.62/month

Alternative #6

1. Constructs new 2 MGD Layng Creek WTP with membrane filter technology
2. Continues water service to all existing customers
3. Consolidates new WTP facilities on single site where filters currently exist
4. Constructs new 0.74 MG water reservoir in Culp Creek area
5. Land acquisition would be required for construction of WTP and new reservoir in Culp Creek area
6. Transmission line would be replaced**
7. Includes installation of cover on existing 2.3 MG reservoir
8. Phase 1 (improvements over the next 2 to 3 years) Construction cost - \$7,710,000
9. Single family residence rate impact - \$8.58/month

Alternative #7 (This a variation of Alternative #2)

1. Eliminates all water production facilities at Layng Creek
2. Expands Row River WTP facilities by 3 MGD (1 MGD additional capacity)
3. Continues water service to all existing customers
4. All outside-city water customers would be backfed from the City reservoirs by a combination of gravity and/or through pumping stations
5. Transmission line would be replaced**
6. Includes installation of cover on existing 2.3 MG reservoir
7. Phase 1 (improvements over the next 2 to 3 years) Construction cost - \$8,955,000
8. Single family residence rate impact - \$10.70/month

** Alternatives #2 thru #7 require a \$7.6 million expenditure for transmission line replacement over a multi-year period. (see page 50, answer to question 2)

cc: all facility plan holders