

Canadian River Municipal Water Authority Regional Water Planning

With the decline in Lake Meredith, (to the point that it is currently unusable as a water supply) CRMWA is planning to more fully utilize its groundwater resources. The groundwater infrastructure connects with the original surface water system for delivery to the Cities. The current groundwater infrastructure is capable of supplying about half of the original surface water system's capacity. This means half of the original system is unutilized and during peak demand months, up to half of the Cities' needs are not currently being met by CRMWA. The needs vs. supply gap will widen even more over time without either replenishment of the surface water supply (Lake Meredith) or additional groundwater infrastructure.

CRMWA II is the proposed project to bridge the gap in needs vs. supply. An in-house study was performed and found that some of our Member Cities need additional supply immediately while others have their own resources and will not need additional water from CRMWA for several years. 2012 is the first year CRMWA has not supplied surface water and it could serve as a test to see if the Cities can get by solely on groundwater supplied by CRMWA with the current infrastructure plus their local resources (which have historically been used primarily for peak demand). However, forcing the Cities to rely this heavily on their own resources will cause those resources to be exhausted more quickly and local replacement options may be limited. The actual date the expansion will occur will be decided collectively by the Member Cities based on what is most advantageous and affordable for all.

Attached is a drawing that includes cost and capacity tabulations for the proposed CRMWA II. Option A provides the amount of groundwater to fill the original surface water system and satisfy most of our Cities' current needs, when coupled with the original groundwater infrastructure. Option B is 22% more expensive but provides over twice the transmission capacity.

It is requested that these potential projects be included in the Regional Plans of both Regions A & O as alternative strategies for meeting the needs of CRMWA member cities.

CRMWA System

Original System Capacity: 112 MGD
Wellfield Pipeline Capacity: 64 MGD

CRMWA-II Pipeline

CRMWA II (Option A)

54-inch pipeline
Capacity: 55 MGD
20 Additional Wells
2012 Cost Estimate: \$270 million

CRMWA II (Option B)

72-inch pipeline
Capacity: 120 MGD
20 Additional Wells
2012 Cost Estimate: \$330 million

