

5.0 Screening Processes and Results

The Partnership applied three rounds of screening to the alternatives, each progressively refined in technical detail. Throughout the process, any alternative deemed to be infeasible was removed from further consideration by the group.

5.1 Tier One Screening: Low Value or Excessive Cost

Because so many candidate source waters are long distances from the effective recharge areas, conveyance costs were used in the first round of screening to help reduce the permutations of sources and routes into the recharge area. The Partnership utilized two independent tools to estimate conveyance costs for combinations of flow volumes and distances. One tool had been previously developed by CDM Smith and employed for CUA for conveyance planning. The other tool was a planning-level cost estimator developed by SJRWMD and used for the NFRWSP. Both tools were used to evaluate the relationship between flow rate (MGD) and the cost per MGD for various conveyance distances. Both tools clearly demonstrated a very consistent pattern. For flows less than three MGD, unit costs are very sensitive and escalate very rapidly (Figure 5.1) regardless of the distance traveled. Therefore, the first screening criterion for the initial list of alternatives was that available source water flow should equal or exceed three MGD. Stormwater project concepts were screened out during this phase because volumes were anticipated to be below the threshold of three MGD, availability was likely to be extremely intermittent, and because highly uncertain treatment requirements were yet to be developed. Other than stormwater, no other source candidates were removed from further consideration during this tier of screening.

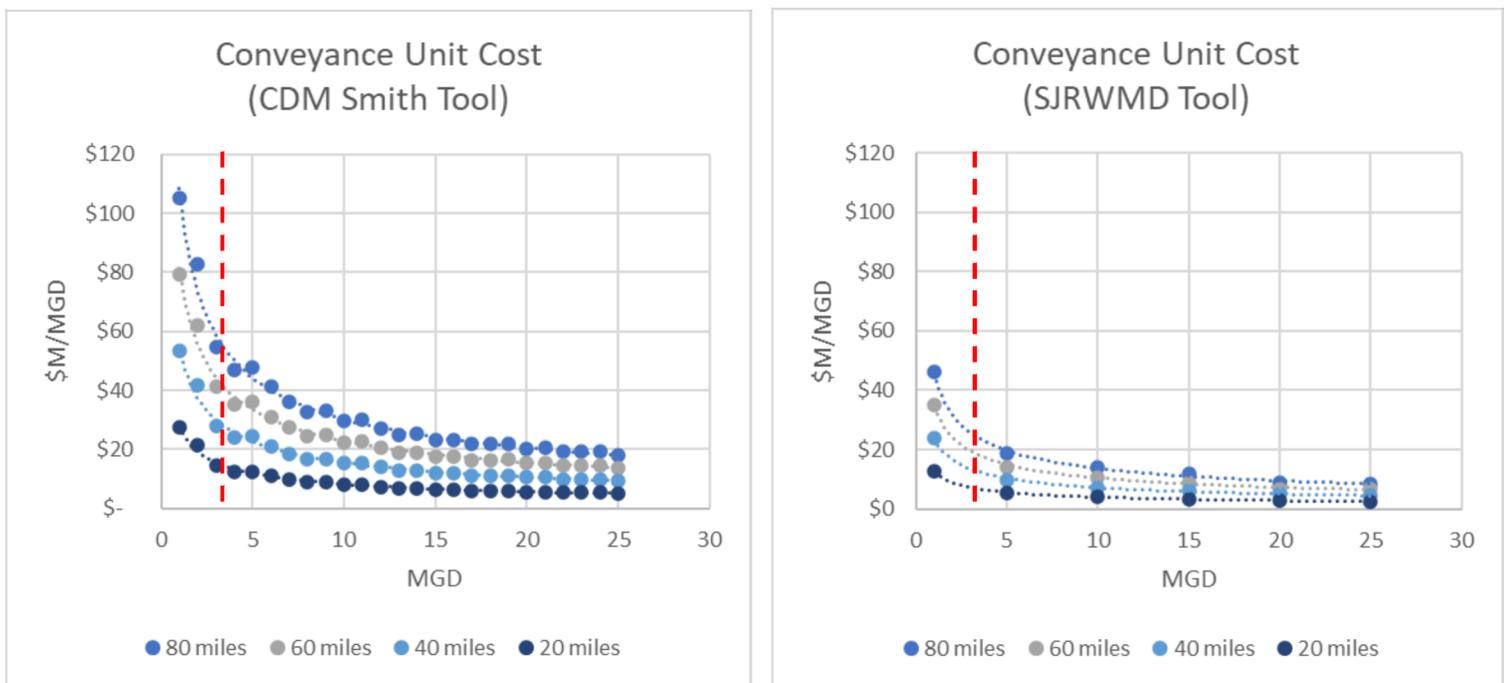


Figure 5.1 Unit Conveyance Cost Screening Factor