

effective method of recharge, but treatment can be the most complicated and costly of the alternatives. Operationally, however, recharge wells are less complex to operate and maintain than RIBs.

Several assumptions were made during the sequential tiers of screening. While the Partnership did not select specific recharge methods for each project, they did conceptually evaluate each method to demonstrate that none of the three should be excluded from further site-specific evaluation due to cost or infeasibility. For this comparative assessment, the following assumptions were made about recharge efficiency of each method:

- For cost and benefit evaluations, recharge efficiency of wetlands was assumed to be 80 percent, but initial hydrogeologic investigation within the overlapping recharge area suggests that higher values are likely attainable.
- Recharge efficiency of RIBs was assumed to be 90 percent, but also assumed to have higher potential when sites are investigated specifically for area and permeability.
- Recharge efficiency of recharge wells is 100 percent.

4.3 Conceptual Routing to Recharge Sites

Each alternative includes a conceptual transmission route from the water source to the target recharge area using state and federal highway rights-of-way. Routes were developed based on a desktop analysis for the sole purpose of estimating conveyance distances for the initial cost estimates used for screening. For cost comparisons, representative locations within the target recharge area (Figure 4.2) were selected to establish transmission distances.