

Table 1

Possibilities for Increasing the Flow of Water to Walker Lake

A. Relatively Easy:

- o Line diversion ditches: ditch lining would help prevent some seepage losses
- o Upgrade distribution systems: improved valving systems would also increase irrigation efficiency; installing pipes in selected parts of the system possible but more costly
- o Schedule irrigation: would regulate irrigation so crops receive water only when they need it
- o Establish a water bank: would allow water to be bought from farmers in drought years that could be used for environmental purposes; has been successful in California
- o Remove non-native plants from the stream channel: high-water-using-plants, such as salt cedar, have proliferated in the stream channel; their removal would make more water available but would also affect some (non-native) habitat
- o Manage ground water and surface water conjunctively: would help improve efficiency and flexibility of system and enhance yields through less conservative operation of storage facilities

B. More Difficult

- o Purchase existing agriculture rights (e. g., in marginal areas): a potentially important option, but funds could be a problem
- o Change crops, e.g., from alfalfa to onions: alfalfa uses much more water than crops such as onions, but the market is not large for such crops
- o Renegotiate Decree C-125: although desirable from the point of view of residents of Hawthorne and Indians, would likely be strongly resisted by farmers
- o Line river channel between Wabuska and Weber Reservoir: much water is apparently “lost” in this area, but turning the river into a canal would likely be resisted by environmentalists

C. Other types of options--not shown to be technically feasible

- o Breed a strain of hatchery trout that can tolerate Walker Lake’s high alkalinity
- o Install devices on side streams to control alkaline minerals from entering Walker Lake