

## Potential Work Plan Projects

The following is an initial description of a work plan that will be input to the RWM process for refinement and modification.

**Soil Erosion from Fallowing:** As mentioned earlier, there is a need to investigate and define a soil stabilization program for fallowed lands. There is the potential for fallowing nearly all of the approximately 3,500 acres of currently cultivated agricultural lands.

**Soil Stabilization of the Borrego Sink:** While no studies have been made of the potential harmful conditions that may exist when the soils within the Borrego Sink area become airborne during high velocity wind events. Studies in the Owens Lake area of Owens Valley have demonstrated substantial deleterious effects on humans.

**Tamarisk Removal:** It is well documented that the Tamarisk tree (a non native) is capable of high water consumption. Tamarisk has historically been planted in the Borrego Valley agricultural area as a wind break for the citrus groves. No estimates have been made of the cost and water conservation benefits of a comprehensive Tamarisk removal program.

**Water Quality Depth Dependent Data:** Some investigators have discounted the usefulness of the lower aquifer (Palm Spring Formation) as a water supply. It has also been speculated that as the Upper and Middle aquifers are depleted, that poor quality water from this deep source might up well into the above aquifers and make them unfit for potable use. A multi-aquifer monitoring well should be constructed to tap all water bearing zones to determine both the quality and hydrostatic pressure of each aquifer. Funding for this monitoring well should be pursued through existing and future water bond programs.

**Allegretti Farms Groundwater Basin:** An importation project identified in the BWD IWRM plan was the import of desalted groundwater from a groundwater basin located about 15 miles to the southeast of the BWD distribution system. Field studies should be conducted to further define the basins useable storage and its water quality.

**Recharge Basins:** The potential for constructing recharge basins, such as the one at De Anza for temporarily capturing and subsequent recharge of the infrequent storm waters that emanate from the mountain basins or from the large watershed in Coyote Creek have not been fully investigated.

**Water Quality in the Agricultural Area:** Little information is known about the quality of groundwater in the agricultural area. It would seem that with the withdrawal of water and a return flow of about 20% of the withdrawn amount along with 100% of the minerals contained in the original extraction, that the water quality beneath the agricultural area may exceed potable standards. Consequently, as agricultural lands are retired, there is a potential for these waters to migrate into the domestic wells of BWD. Monitoring wells should be constructed in the agricultural area to define the vertical distribution of the potentially poor quality waters.

**Mulching for Water Conservation:** As reported in the BWD IWRM plan an experiment was conducted to identify potential water savings resulting from heavy mulching on citrus crops. A significant savings was observed, but with significant costs. This study could be replicated to determine if the costs, if born by the domestic water users, would be competitive compared to the alternatives of importing new water into the area.

**Outreach on Water Pollution Prevention and Conservation:** Create a “Water Education Team” with the intention of educating remote area on water pollution prevention and conservation...disseminate educational materials and information that empowers residents to take action steps to ensure a pure water supply for their household, community and region.

**Small Water Systems Upgrades:** Apply for upgrades to small water systems.

**Small Water Systems Water Quality Testing:** Testing well water quality for small systems.

**Wetlands/Habitat Restoration/Enhancement Projects:** Possible opportunities in the Boulevard/Jacumba area could include Carrizo Creek, Boundary Creek, Tule Creek, etc.

**School Districts Wellness Program:** All school districts within the United States are required by law (Federally Mandated) to create a district wellness policy. Clean water is a key element to health.

**Conjunctive Use/Water Banking:** Investigate the feasibility of using the Borrego Valley groundwater basin as a water bank for storing water in surplus years for other agencies.

**Wellhead Protection:** Drinking water wells are subject to potential contamination from nearby surface activities.

**Watershed Protection:** Upstream urban uses may generate pollution that can migrate downstream and subsequently recharge a groundwater drinking water source.