

## WATER

12 JUN 2001

### A. Reasons for Involvement:

1. Land and water relationship
2. Adjudication (prior appropriation-'...first in time, first in right...' & beneficial use) initiated in 1974; issues between mining water claims and Indian Reservations. (McCarran Amendment, 1982, allowed for the States to determine the water rights of claimants) Cochise County (4M acres: 41% private and 59% government (7% BLM; 13% USFS/NPS; 36% AZ State and 3% Ft Huachuca)) Sierra Vista Subwatershed: 35% private and 65% government (14% BLM; 11% USFS/NP; 26% AZ State and 14% Ft Huachuca).
3. Corps of Engrs Real Estate (Phoenix Office) Lead
4. Post submits claim in 1981 (In Re Gila River and Source) for 138 facilities (25 wells, 39 springs, 74 ponds); 10,522 ac ft claimed; 10,087 ac ft groundwater (4,000 current use & 6,000 for future use and in case of a national emergency) and 435 ac ft surface water (26 springs & 74 ponds). 66,000 claims from 24,000 parties.
5. 1991 DA Envir Lit Lead – Local SJA
6. Hydrographic Survey Report (HSR) for San Pedro River final report, 19 Nov 91 (Sierra Vista Subwatershed-1,036 square miles; San Pedro Riparian National Conservation Area -78 square miles; Mexico watershed-700 square miles; San Pedro River 145 miles, Mexico to Gila River, 123 miles in US); HSR reviewed (DIS/SJA/DA/DOJ) and protests submitted to Maricopa Superior Court May 1992.
7. Nov 92 – Post joins Upper San Pedro Technical Review Committee (TRC) (Cochise County Resolution)
8. 1993-1996: Settlement Talks
9. 1996-1999: TRC involvement
10. Upper San Pedro Partnership (USPP) established: Sep 98 to present
11. Installation BO/MOU tied to USPP (Oct 99)
12. Indian settlements continue; of importance is the Gila River Indian Community's (GRIC) settlement initiative in the Lower Gila Basin. Doesn't expressly include San Pedro River, however, implied with reference to Globe Equity #59 (1935) Decree includes all tributary waters in time immemorial to

the Gila River. If successful, next settlement tied to Lower will be the Upper Gila Basin which will address the Globe Equity #59 issue (very important to the installation, esp. if waiver of claim by Indians to other federal claims; however, it will not resolve the issues between the feds and non-feds or the feds versus feds within the Sierra Vista Subwatershed).

13. Court wants to start pre-hearing conference with Fort Huachuca (not sure when and may, for the moment, have become OBE);

## B. POST WATER AND SEWAGE SYSTEMS.

### 1. Water:

- a) 8 potable water production wells. Depths range from 701' to 1,203'. Static water levels range from 468' to 527'. Pumping capacity range between 400-700 gpm. The 8 wells have a capacity rated at 5,600 gpm or 8.06 MGD, continuous operation. Average daily pumpage is 2.2 million gallons.
- b) 5 storage facilities with 5,450,000 gallons capacity. Reservoir Hill, two each: 200K and 250K. Grierson: 1.5M. Commissary: 3M; Squire Elevated: 500K.
- c) Three Zones: old post; lower cantonment/south range; and industrial/east range.

### 2. Sewage:

- a) Capacity: 2.7 MGD
- b) Daily Average: 1.2 MGD
- c) Peaks: 2.1 MGD, 1995; 1.8 MGD Aug 96; 1.6 MGD, Aug 97.

### 3. INFLUENT/EFFLUENT (Annual):

- a) Average pumped (potable water): 2,484 ac ft
- b) Average influent: 1,522 ac ft (61% of pumped groundwater or 39% consumptive loss; water leak detection survey and sewer leak detection survey)
- c) Average effluent: 1,400 ac ft (92% of influent)
- d) Average Distribution of effluent:

1) Reuse:

(a) Golf Crse: 477 ac ft

(b) Chaffee Parade Field/MI Village: 47 ac ft.

Total of 524 ac ft, 37%

2) Recharge (East Range Ponds): 705 ac ft, 50%

3) Retained within System/Losses: 171 ac ft, 13% (need effluent distribution system leak detection survey)

C. WATER TRENDS:

1. 1999 water pumpage: 1,893 ac ft; 1.7 mgd.
2. 1999 water pumpage is 13% less than that pumped in 1998 (2,176 ac ft).
3. 1999 water pumpage is 31% (852 ac ft) less than the 18-year (1982-1999) average year average year to date pumpage (2,745 ac ft).
4. 1999 water pumpage is 32.4% less than the 37-year (1963-1999) average year to date pumpage (2,804 ac ft).
5. Water usage continues to decrease. The major decrease is attributable to:
  - a. Water conservation programs: Water Policy of March 1994 and Water-Wise.
  - b. Retirement and demolition of WWII wood.
  - c. Water leak surveys/repairs.