

Figure 4-1
Water-Year Precipitation and SCWD Annual Groundwater Production, 1965-2003

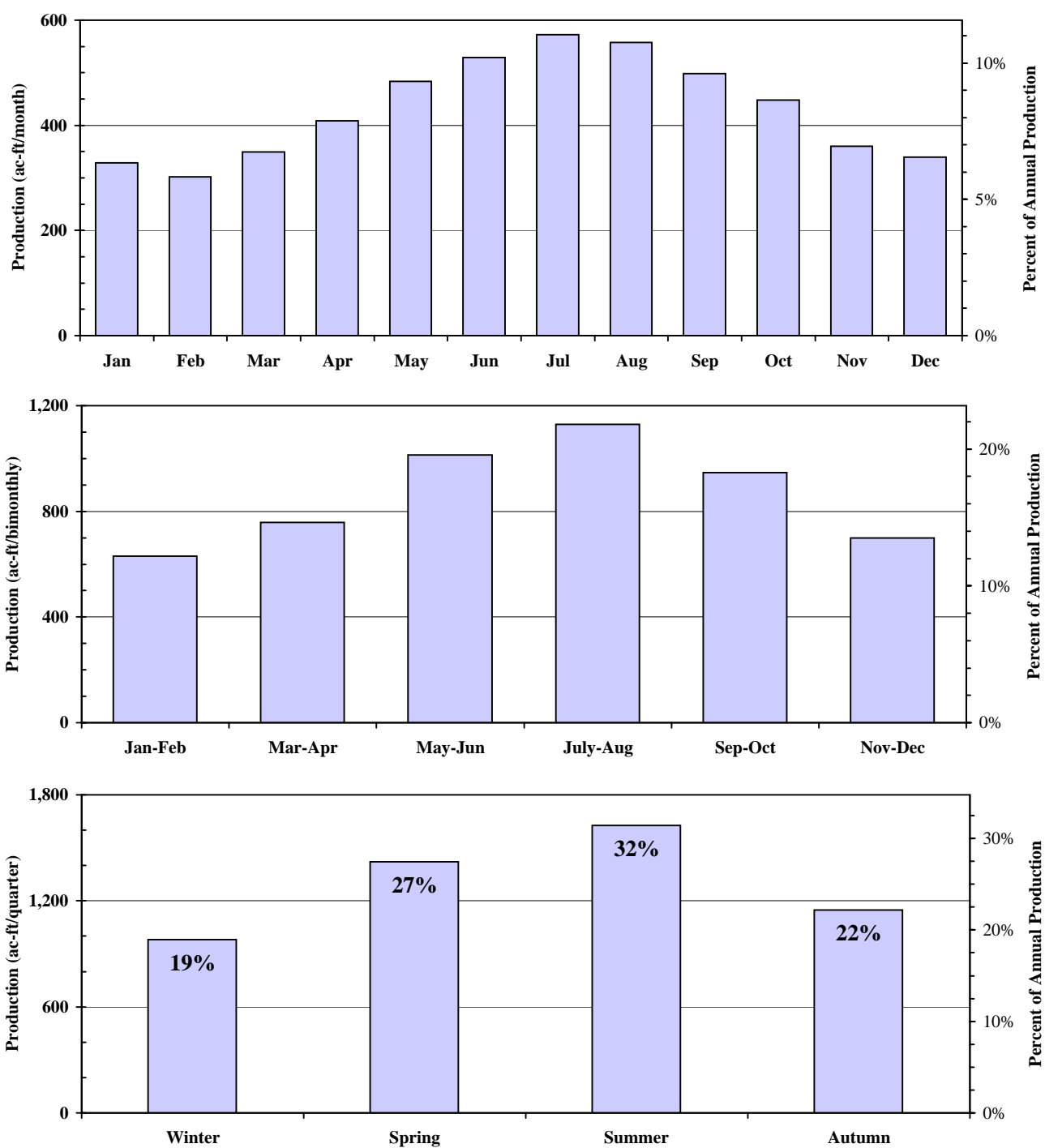
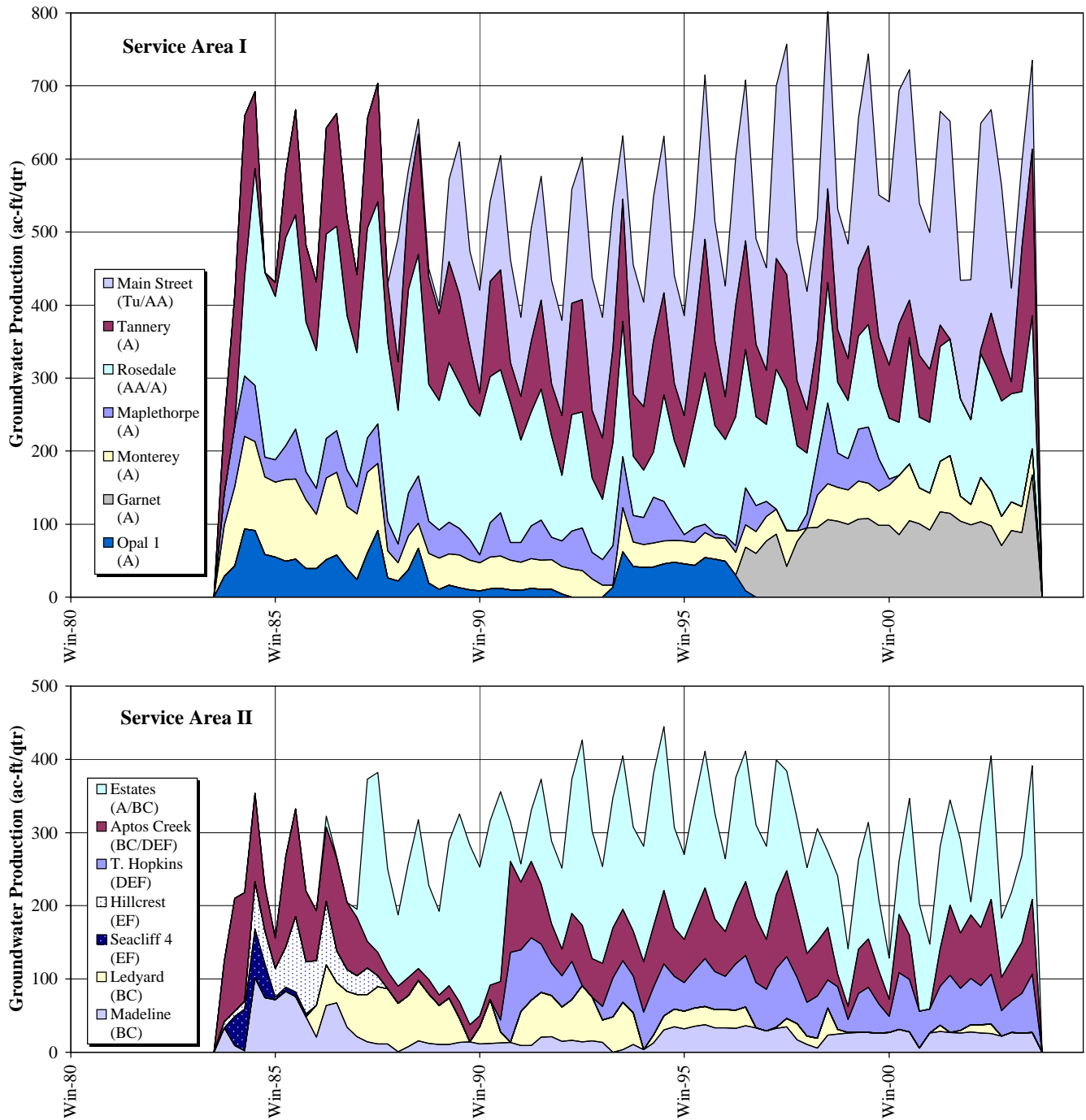
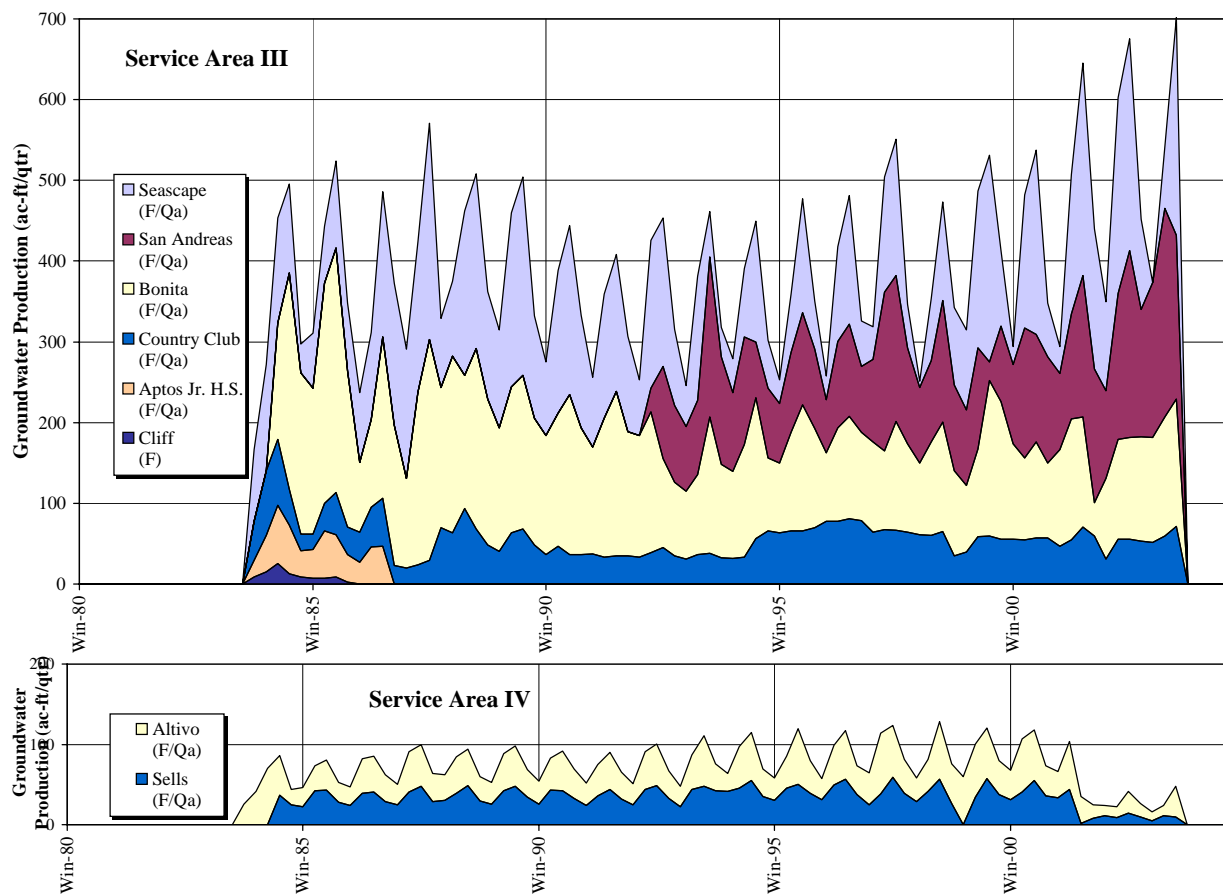


Figure 4-2
Average Monthly, Bi-Monthly, and Quarterly SCWD Groundwater Production
1984-2002



Wells are stacked in plots in same bottom-to-top order as key.

Figure 4-3a
SCWD Quarterly Groundwater Production
Service Areas I and II



Wells are stacked in plots in same bottom-to-top order as key.

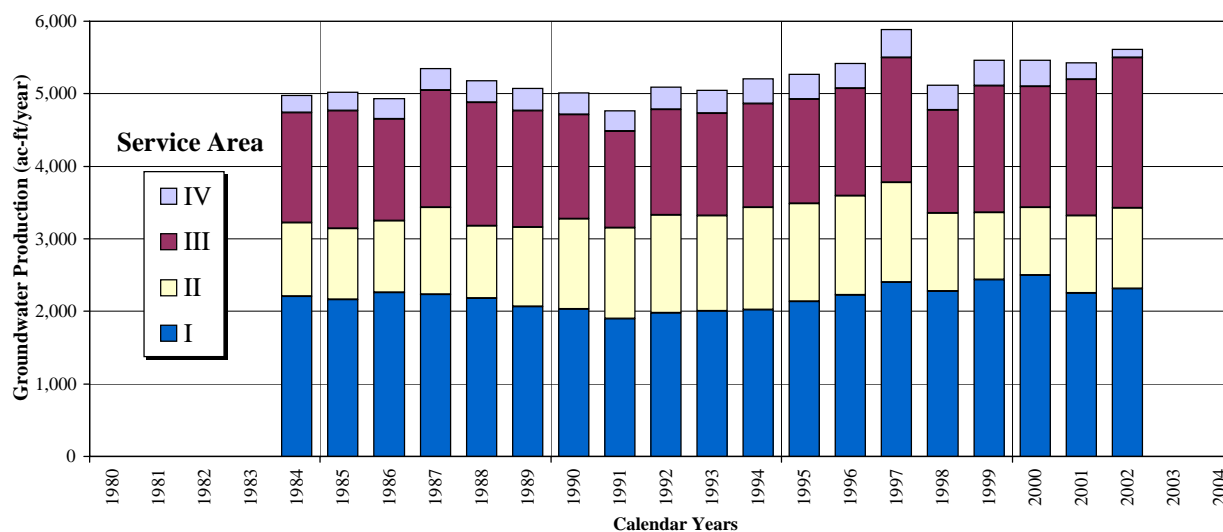


Figure 4-3b
SCWD Quarterly Groundwater Production
Service Areas III and IV and Total Annual Production

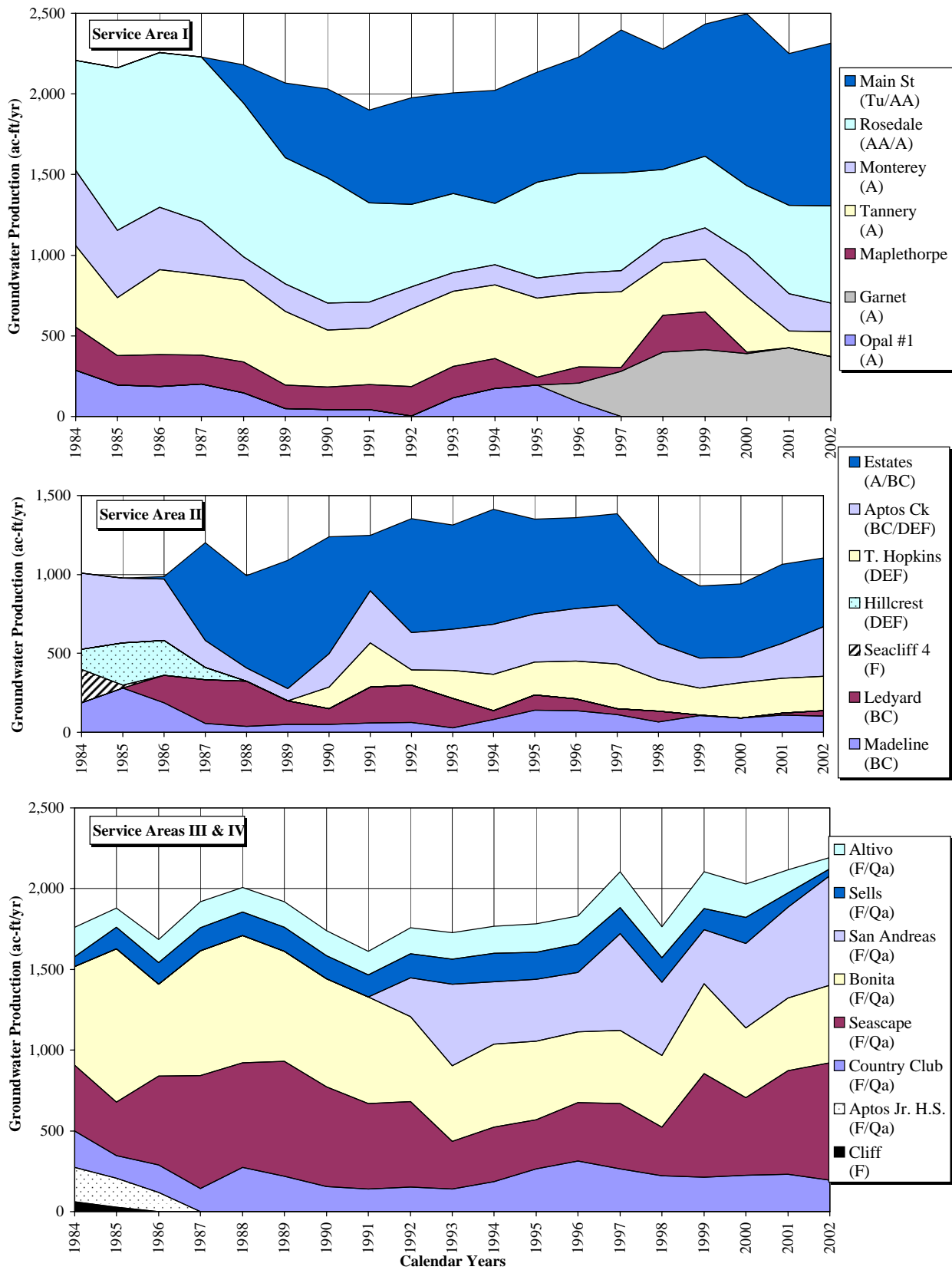
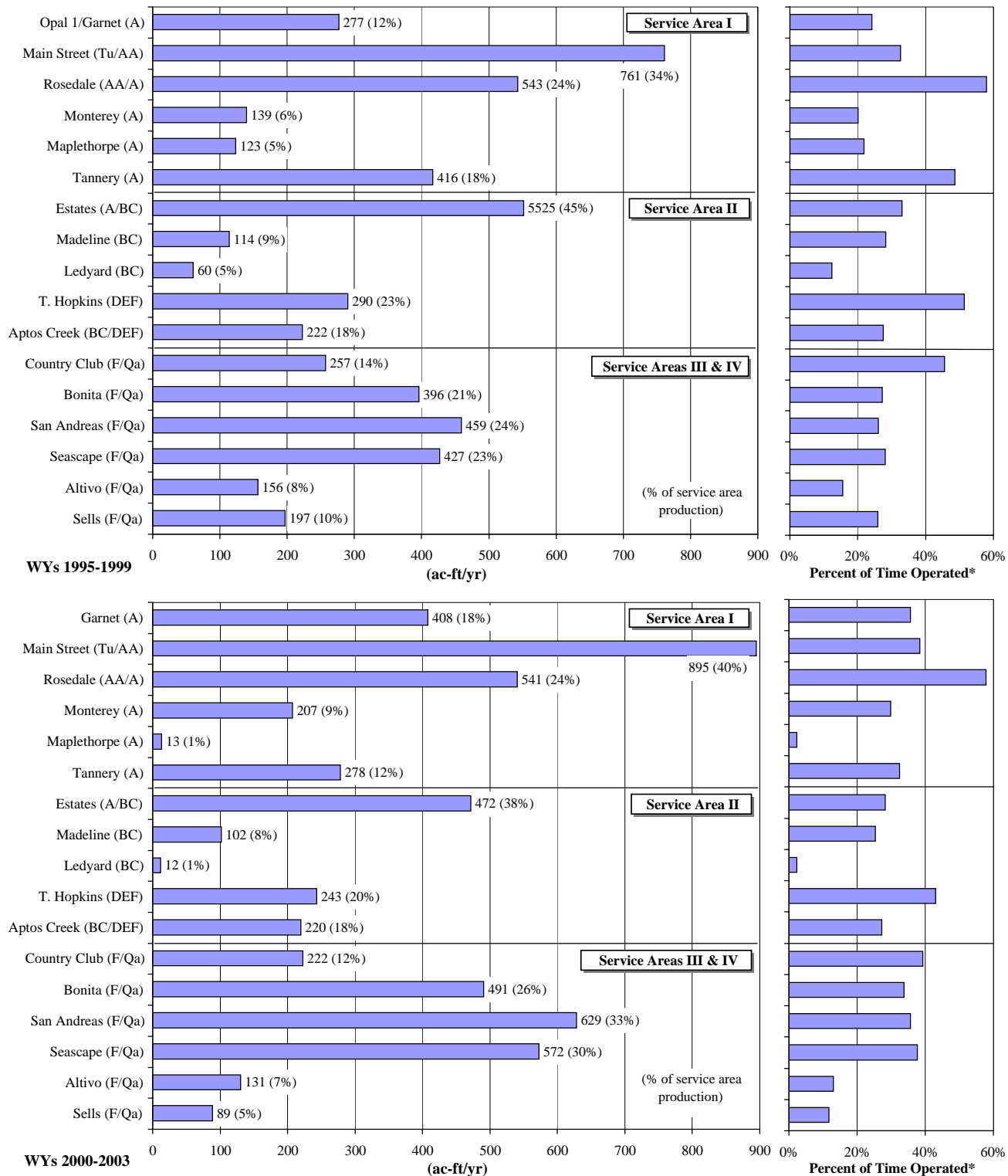


Figure 4-3c
SCWD Annual Production by Service Area



*Based on reported production capacities (Table 1-1).

Figure 4-3d
SCWD Average Annual Groundwater Production by Well

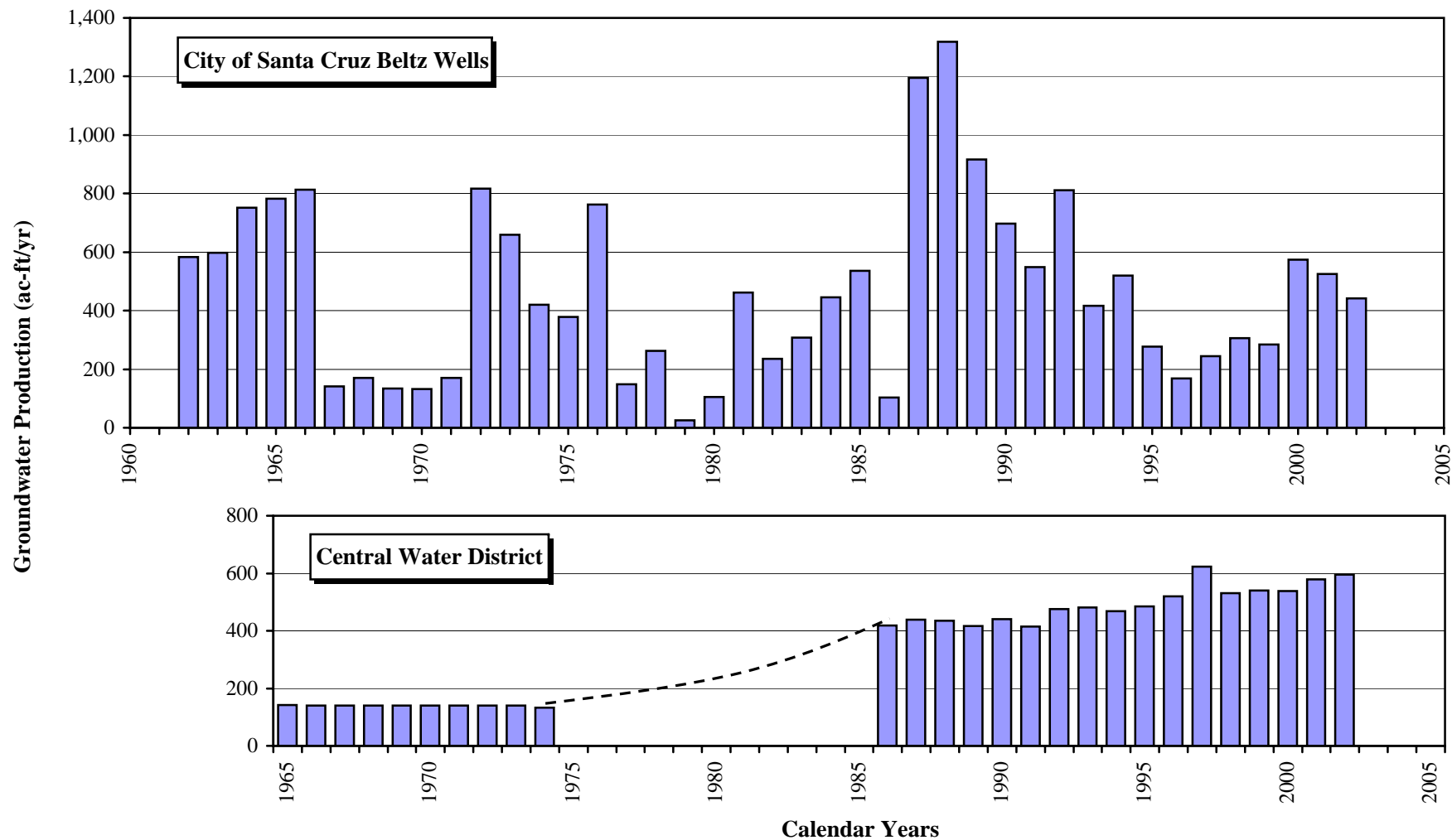
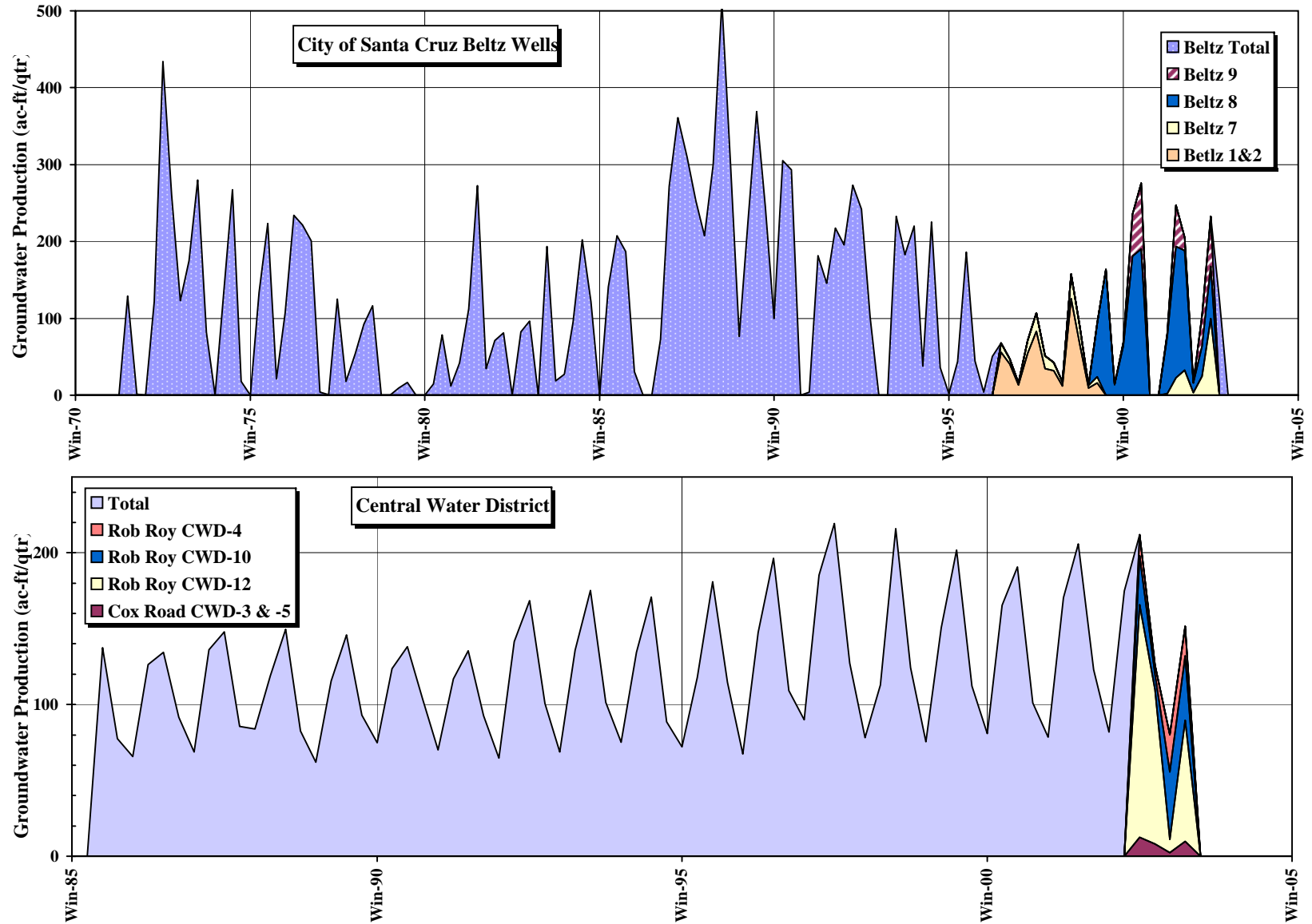


Figure 4-4a
City of Santa Cruz and Central Water District Annual Groundwater Production



Note different X and Y scales.

Figure 4-4b
City of Santa Cruz and Central Water District Quarterly Groundwater Production

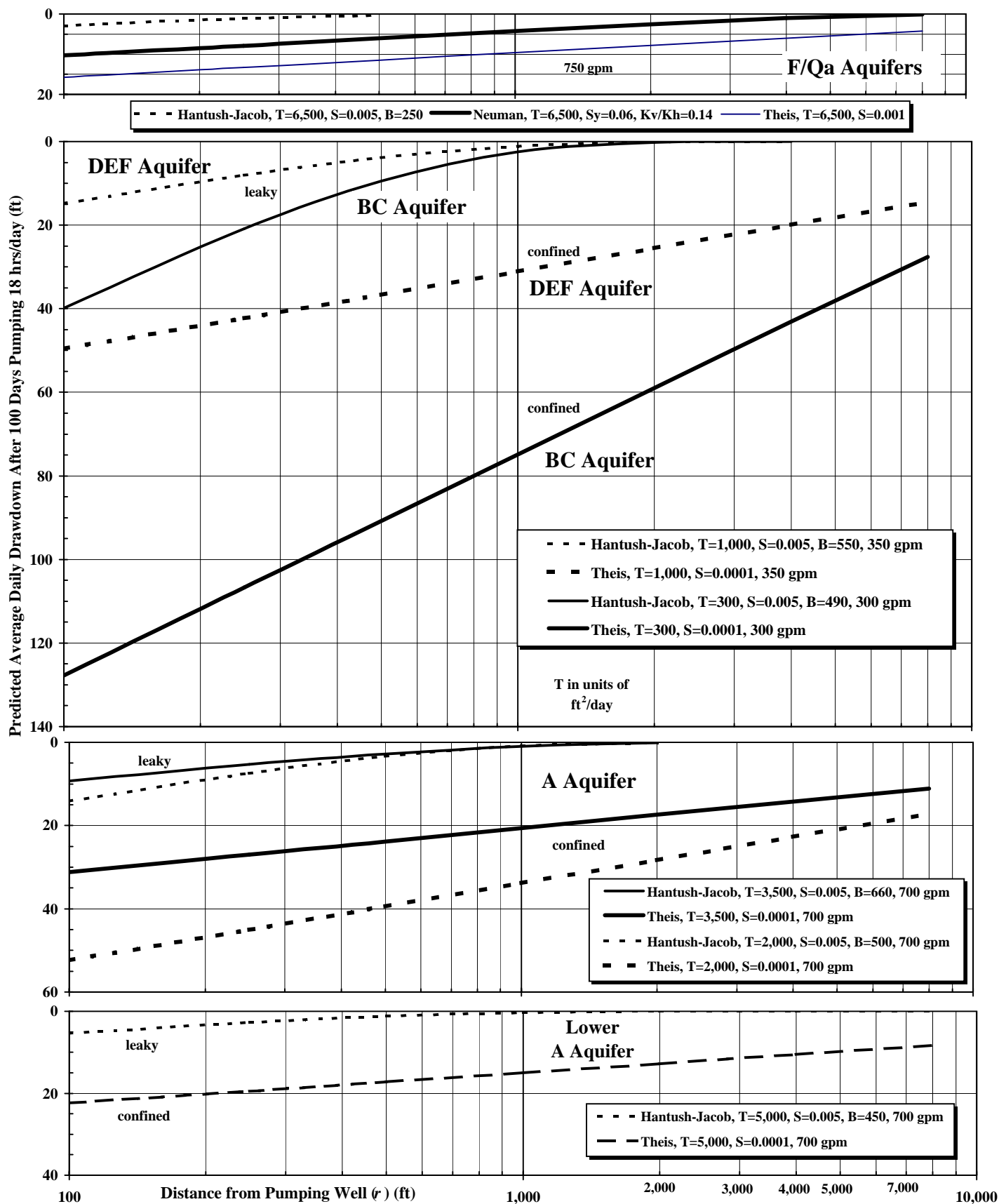
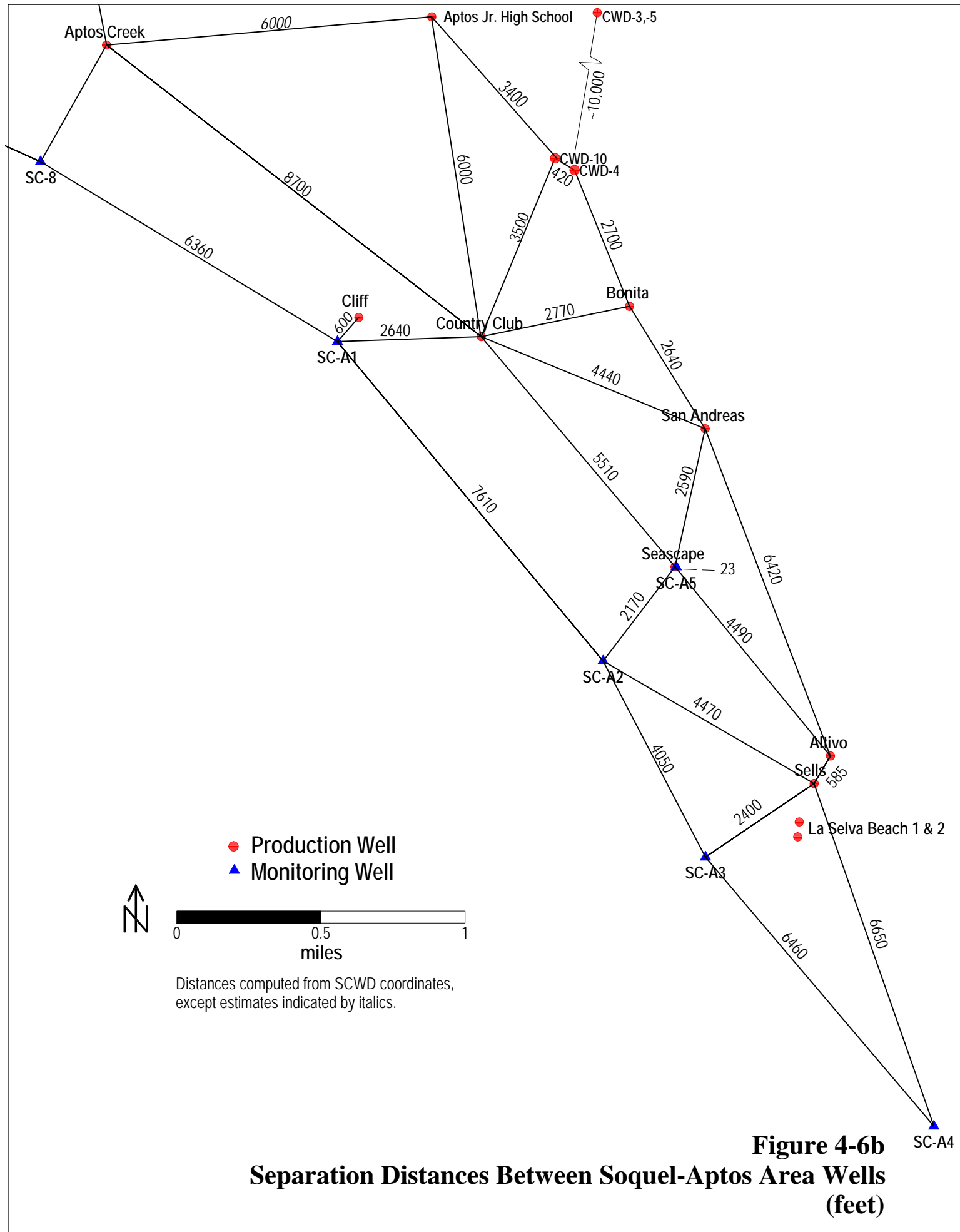


Figure 4-5
Estimated Distance-Drawdown Relations for Soquel-Aptos Aquifer Zones



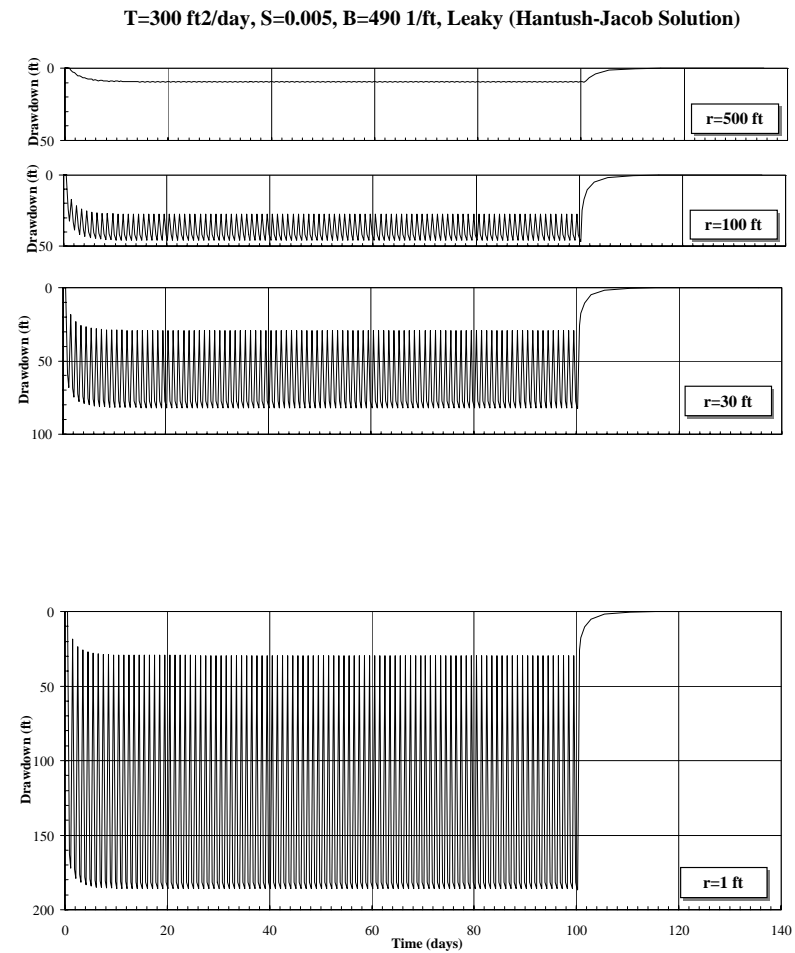
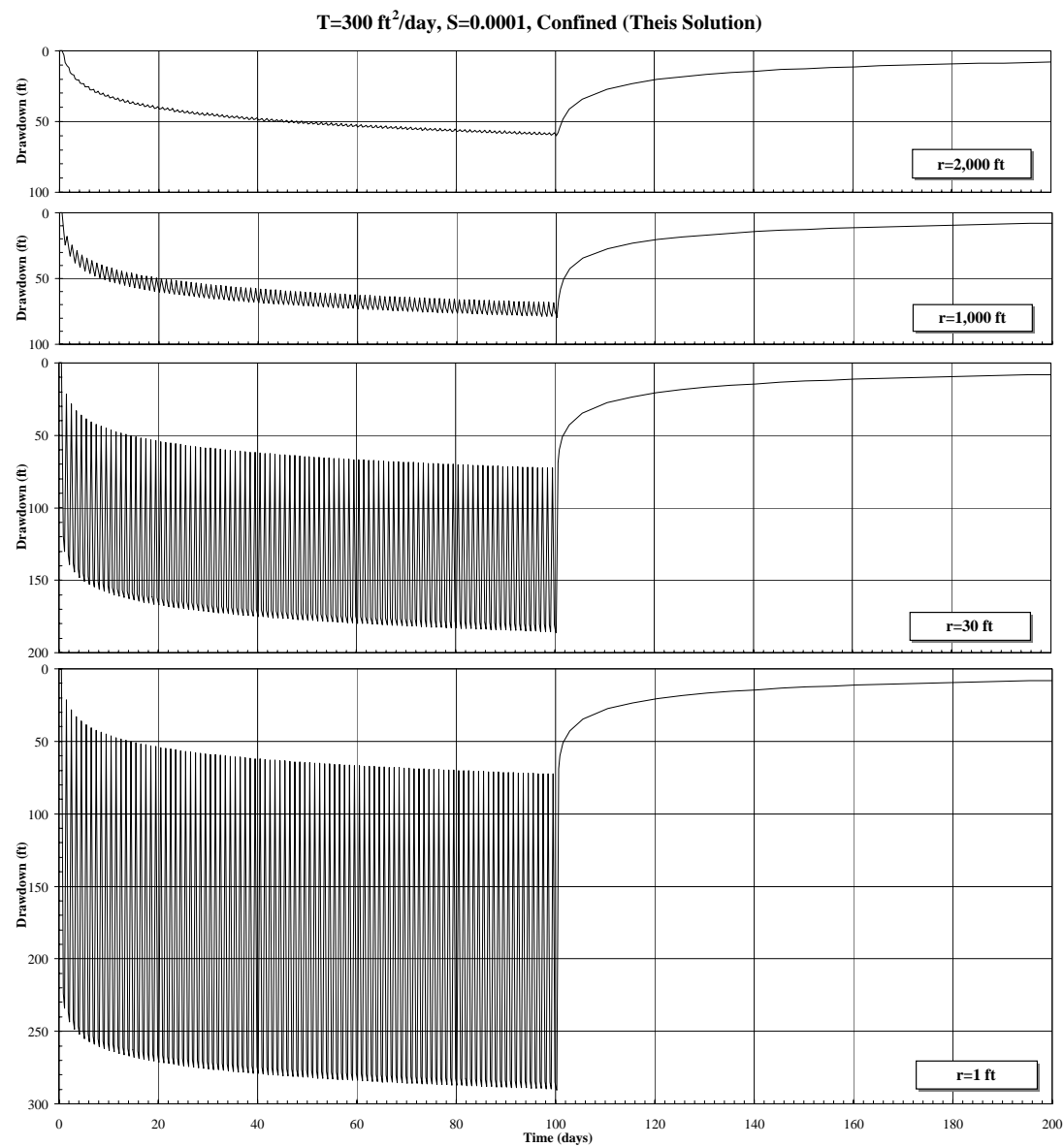
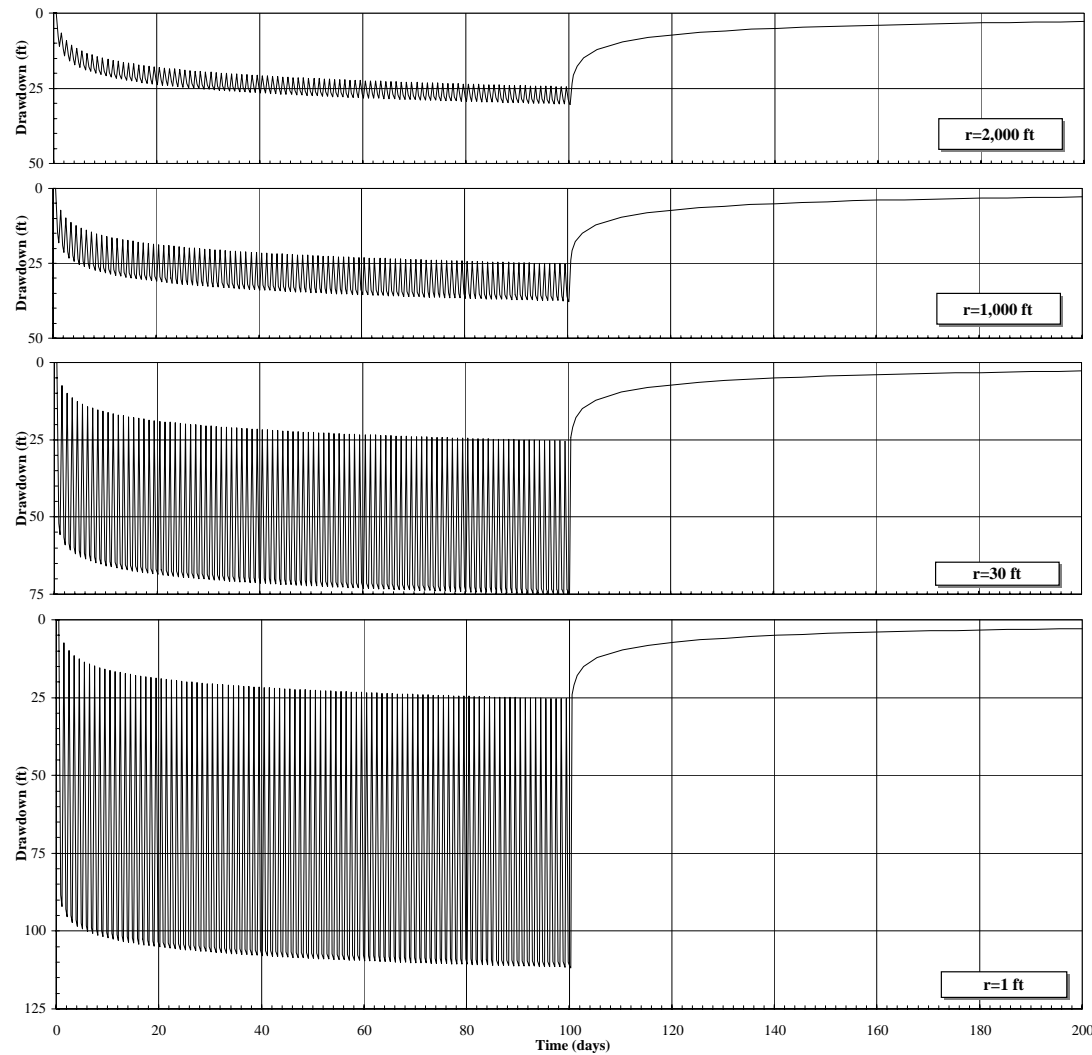


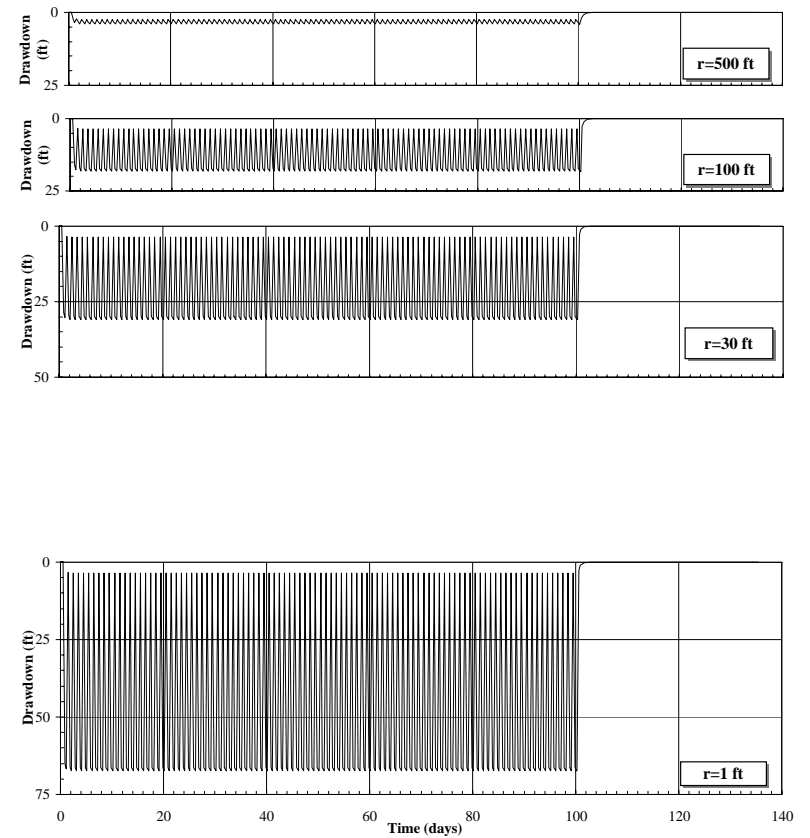
Figure 4-7a

**Simulated Drawdown and Recovery from Pumping Purisima Aquifer BC Under Confined and Leaky Conditions
at 300 gpm for 100 days at 18 hrs/day**

**$T=2,000 \text{ ft}^2/\text{day}$, $S=0.0001$, $Q_p=700 \text{ gpm}$, Confined (Theis Solution), or
 $T=1,000 \text{ ft}^2/\text{day}$, $S=0.0001$, $Q_p=350 \text{ gpm}$, Confined (Theis Solution)**



**$T=2,000 \text{ ft}^2/\text{day}$, $S=0.005$, $B=500 \text{ 1/ft}$, $Q_p=700 \text{ gpm}$, Leaky (Hantush-Jacob Solution), or
 $T=1,000 \text{ ft}^2/\text{day}$, $S=0.005$, $B=500 \text{ 1/ft}$, $Q_p=350 \text{ gpm}$, Leaky (Hantush-Jacob Solution)**



(Note change in vertical scale compared to Figure 4-5a)

Figure 4-7b
Simulated Drawdown and Recovery from Pumping Purisima Aquifers A or DEF Under Confined and Leaky Conditions
for 100 days at 18 hrs/day

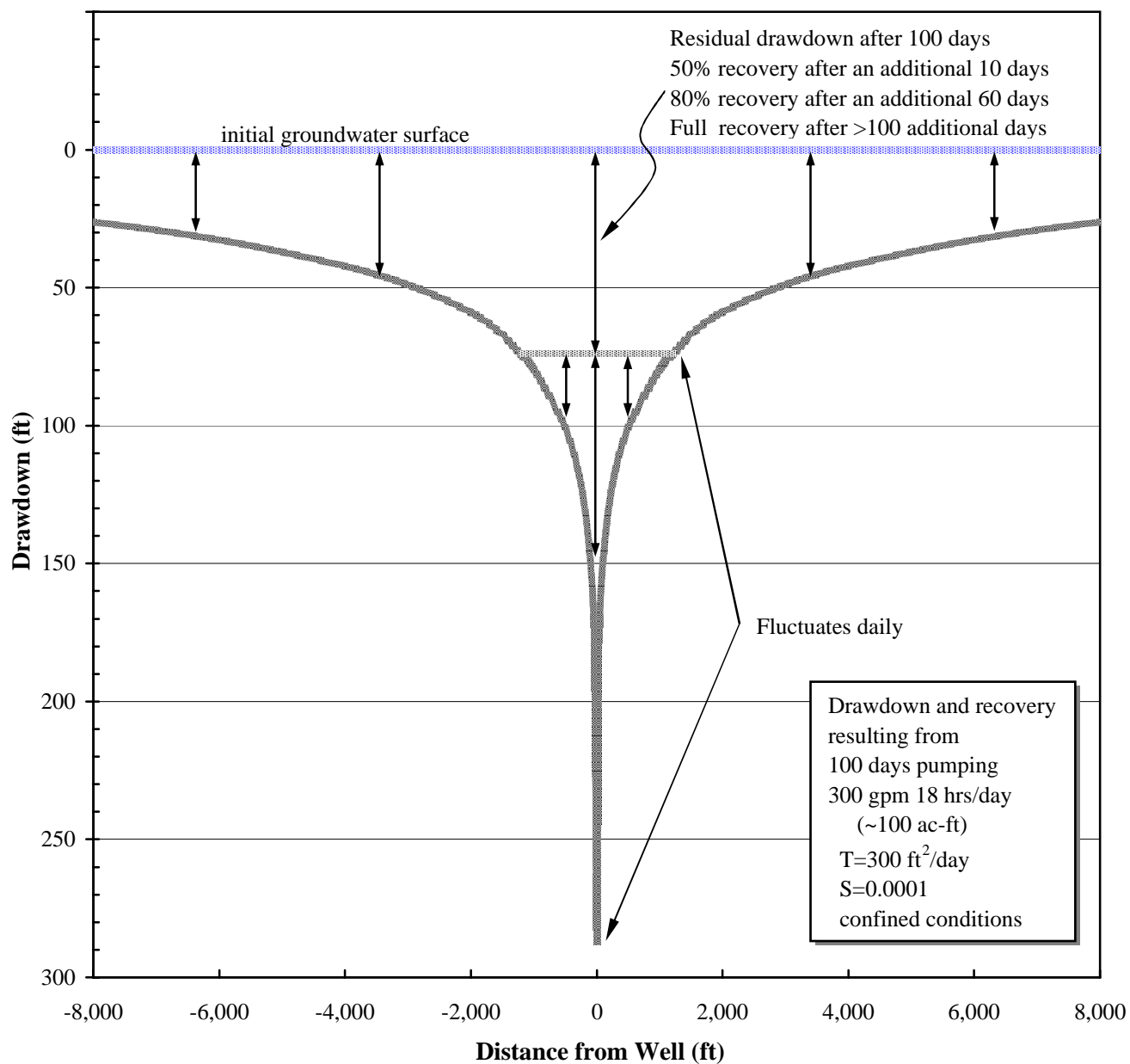


Figure 4-7c
Simulated Drawdown and Recovery from Pumping Purisima Aquifer BC

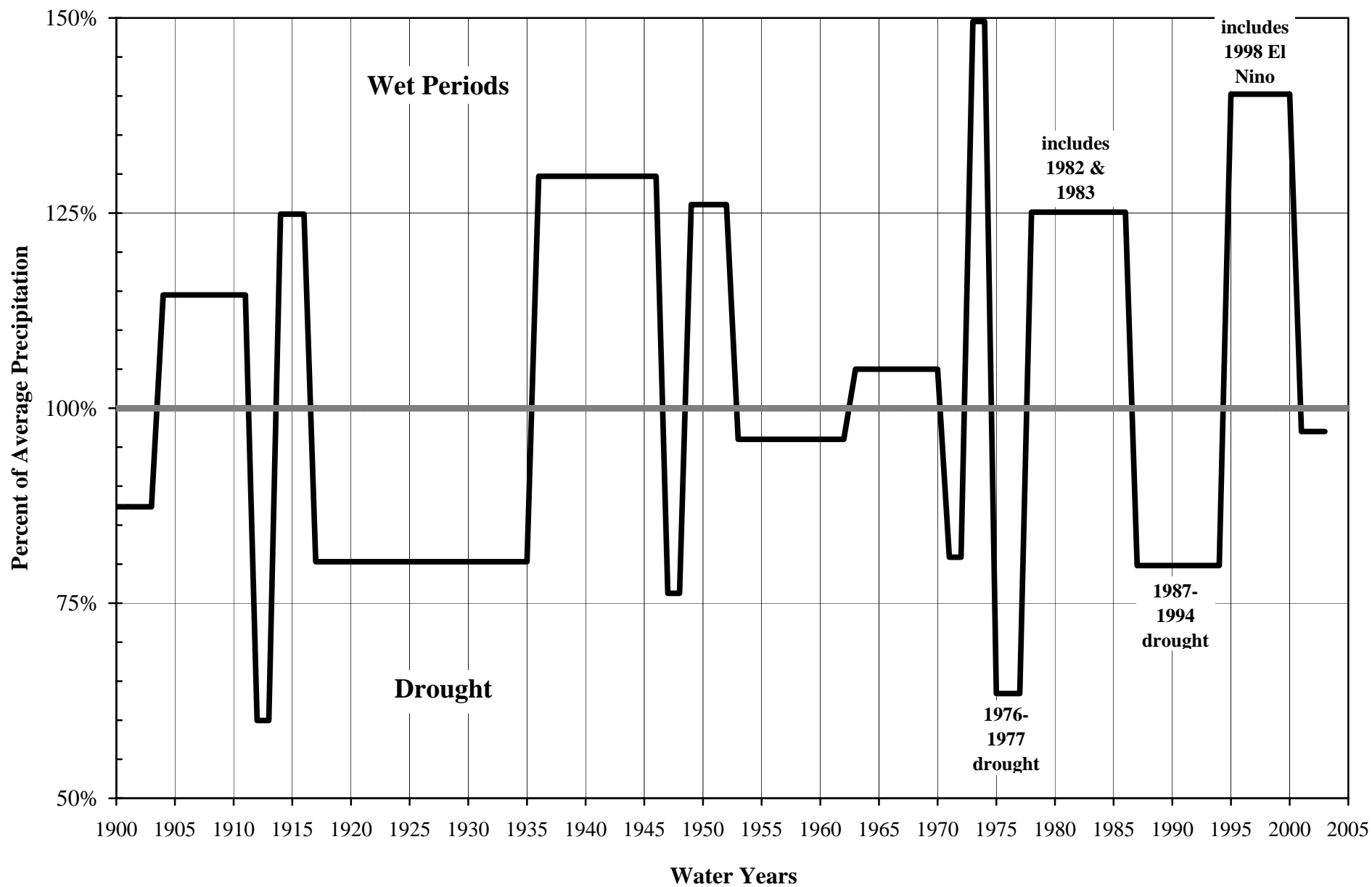


Figure 4-8
Periods of Above and Below Average Precipitation at Santa Cruz, WYs 1900-2003

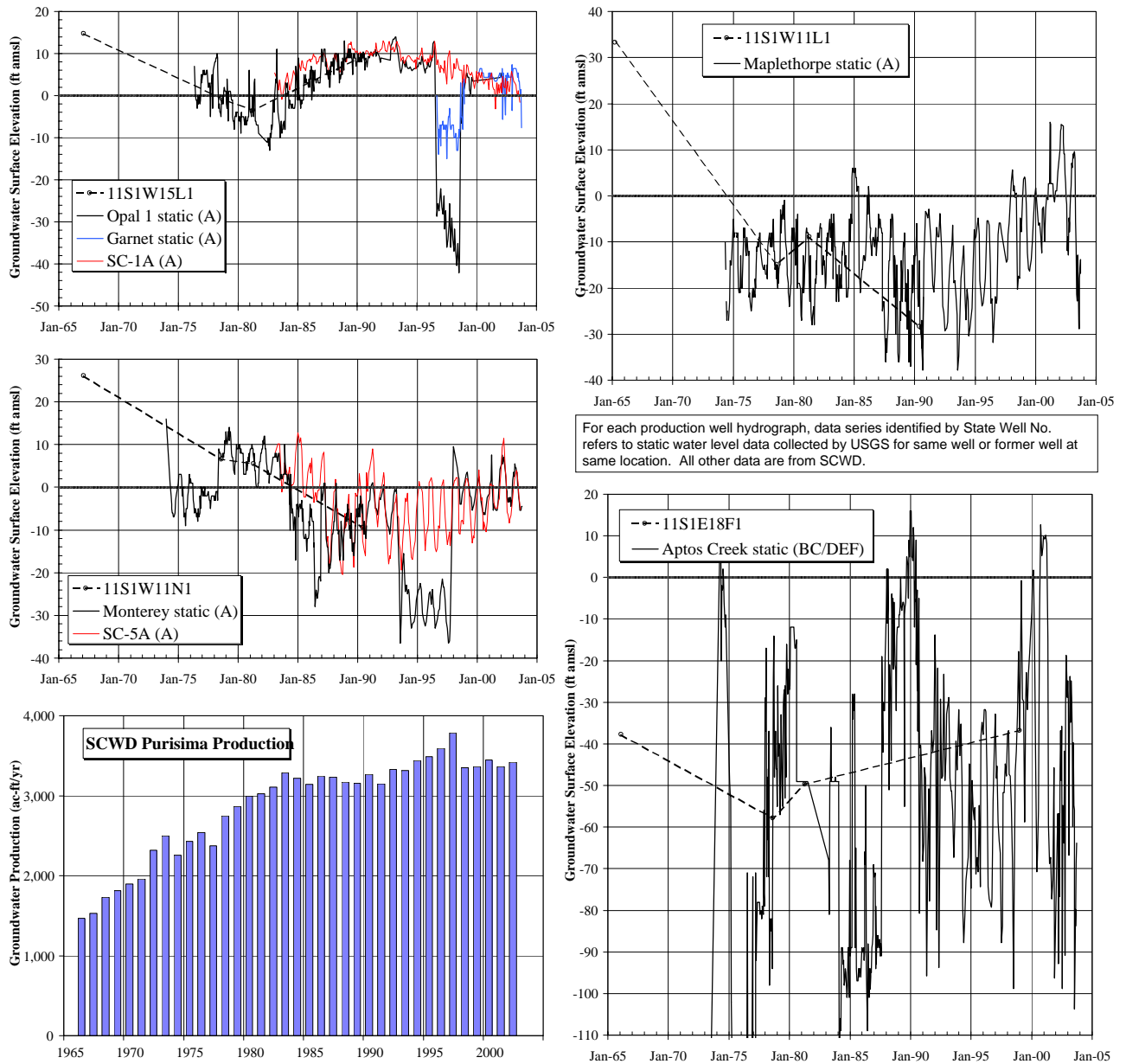
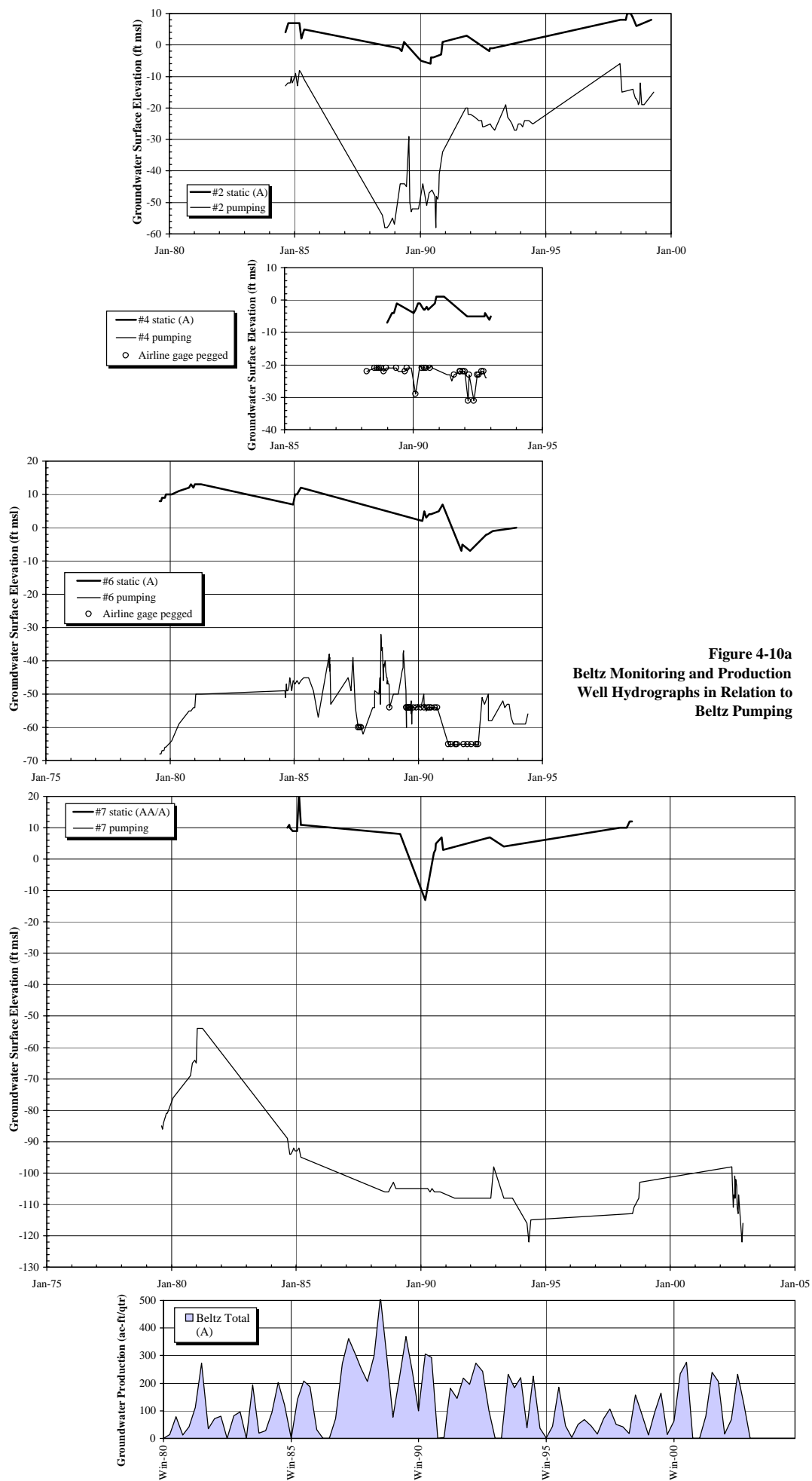


Figure 4-9
Hydrographs for SCWD Wells with Pre-1975 USGS Water Levels



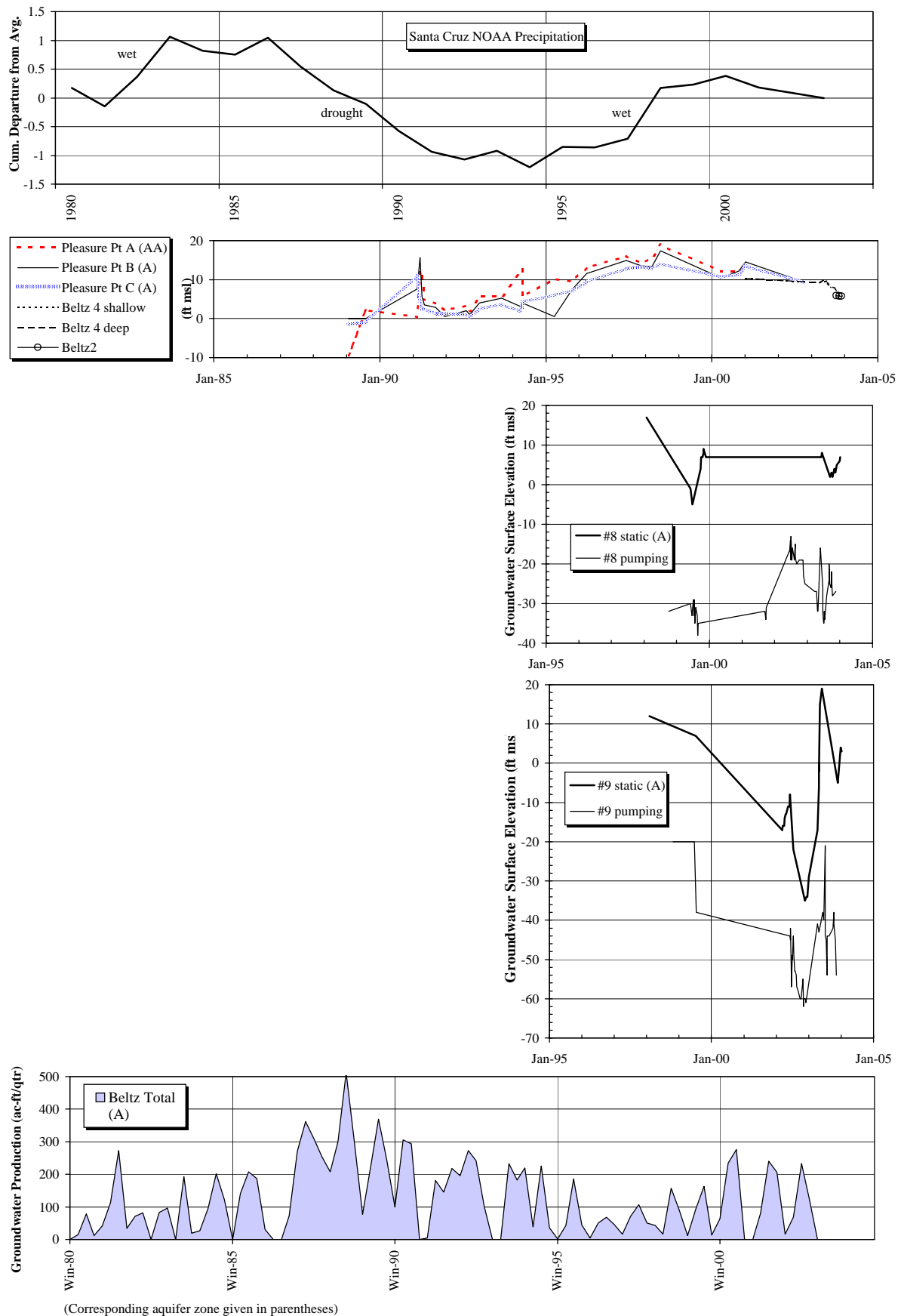


Figure 4-10b
Beltz Monitoring and Production Well Hydrographs in Relation to Beltz Pumping

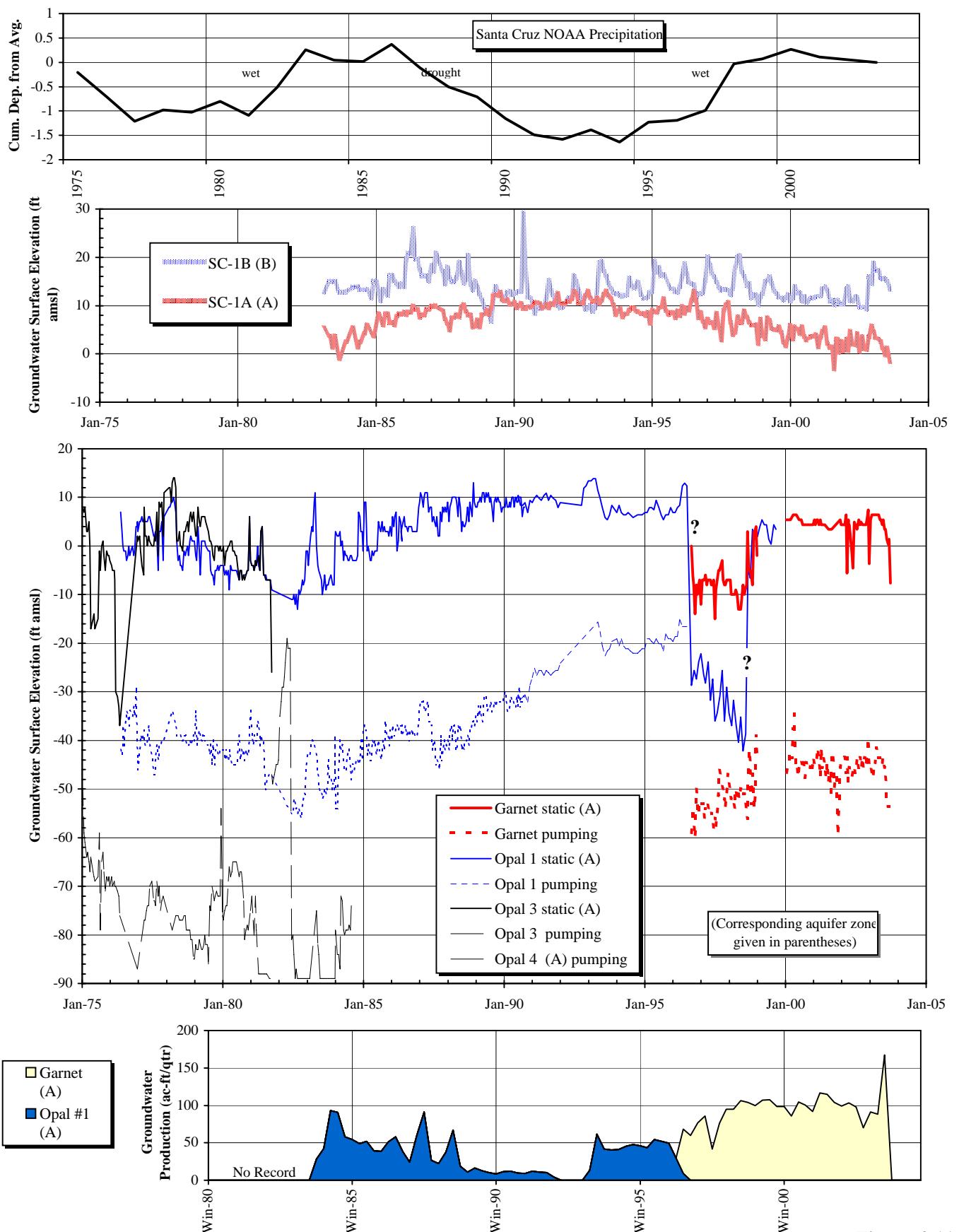


Figure 4-11
SC-1, Opal, and Garnet Well Hydrographs in Relation to Opal 1, Garnet, and Beltz Pumping

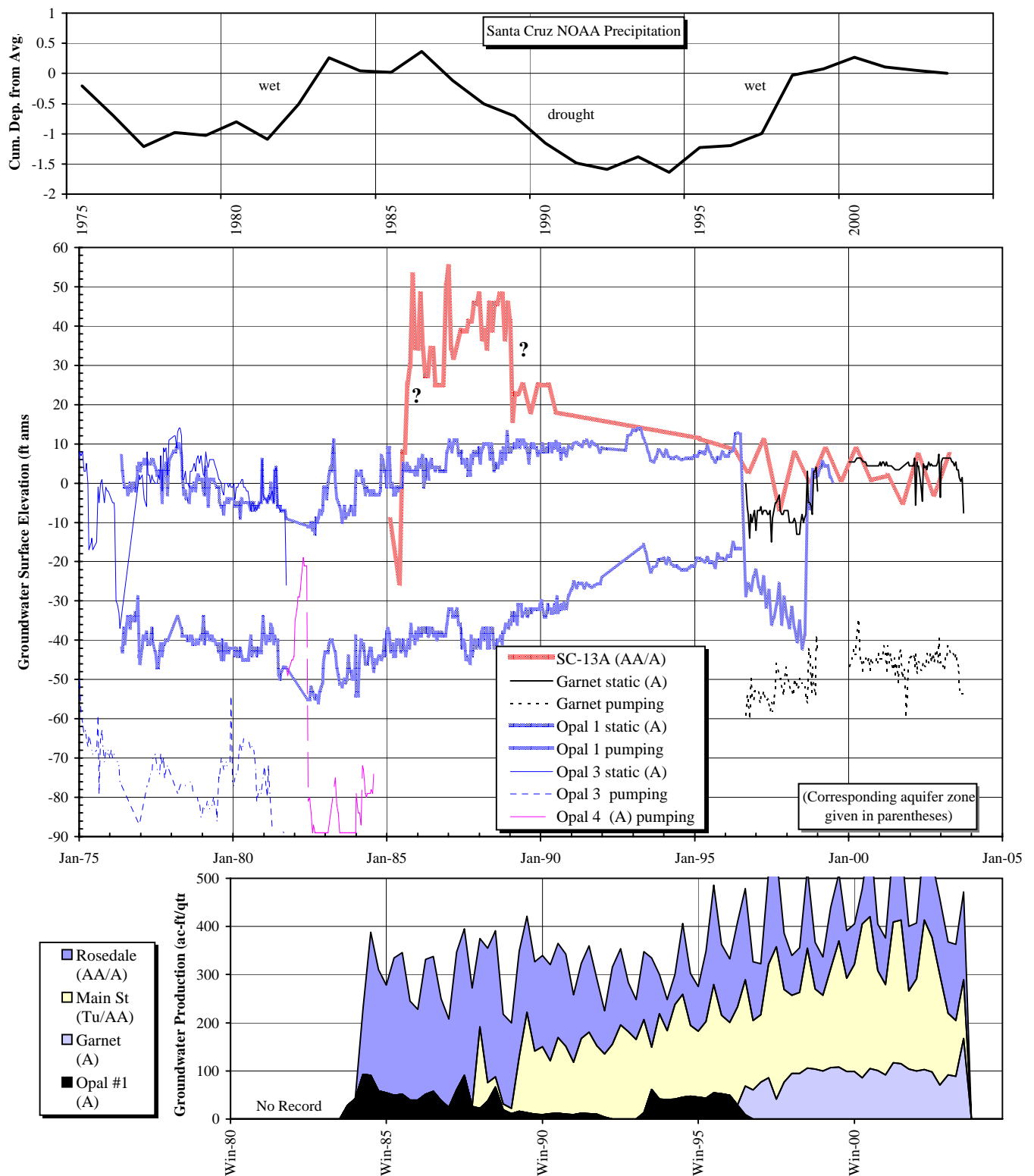


Figure 4-12
SC-13A, Opal, and Garnet Well Hydrographs in Relation to
Opal 1, Garnet, Main Street, and Rosedale Pumping

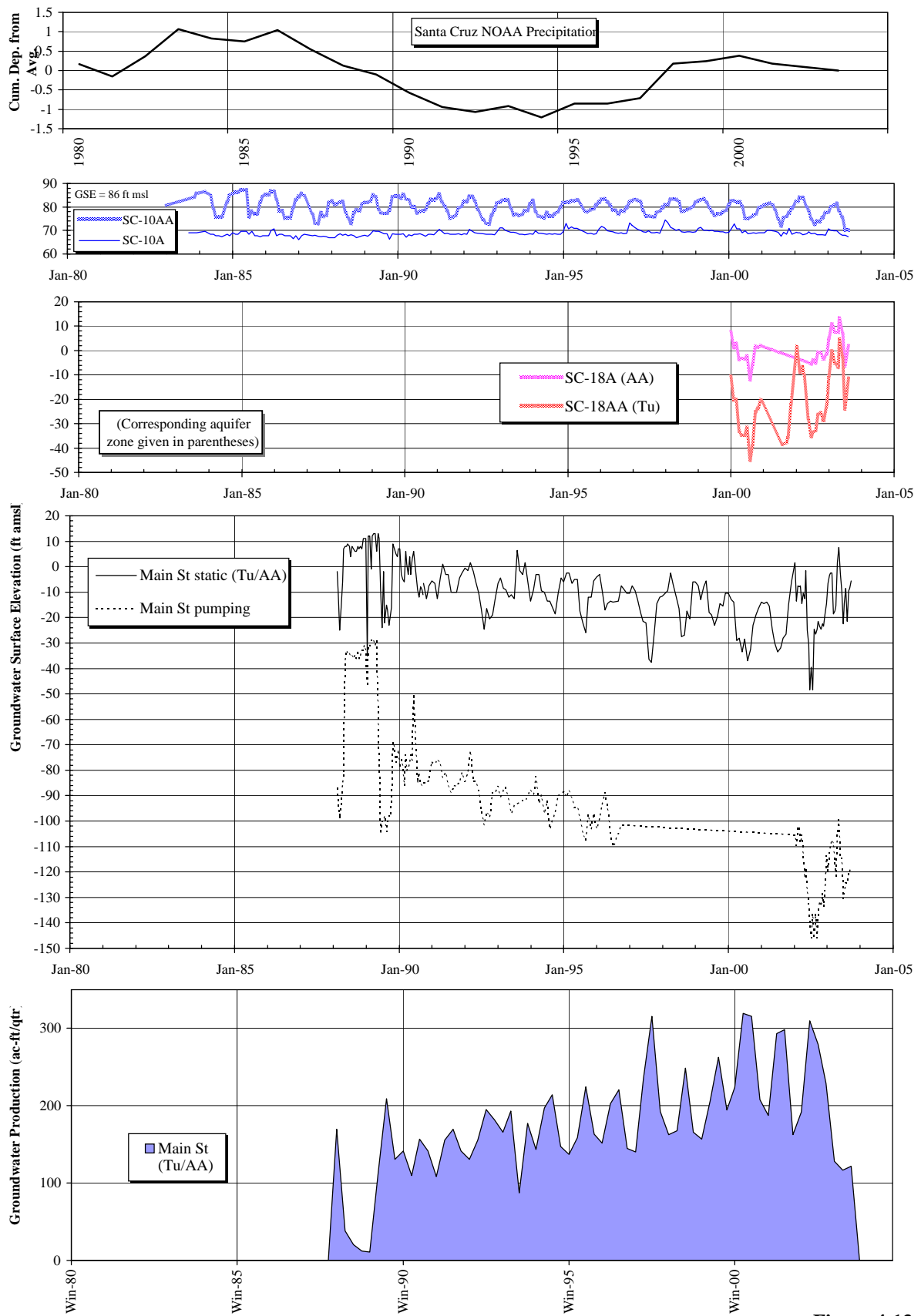


Figure 4-13
SC-10, SC-18, and Main Street Well Hydrographs in Relation to Main Street Pumping

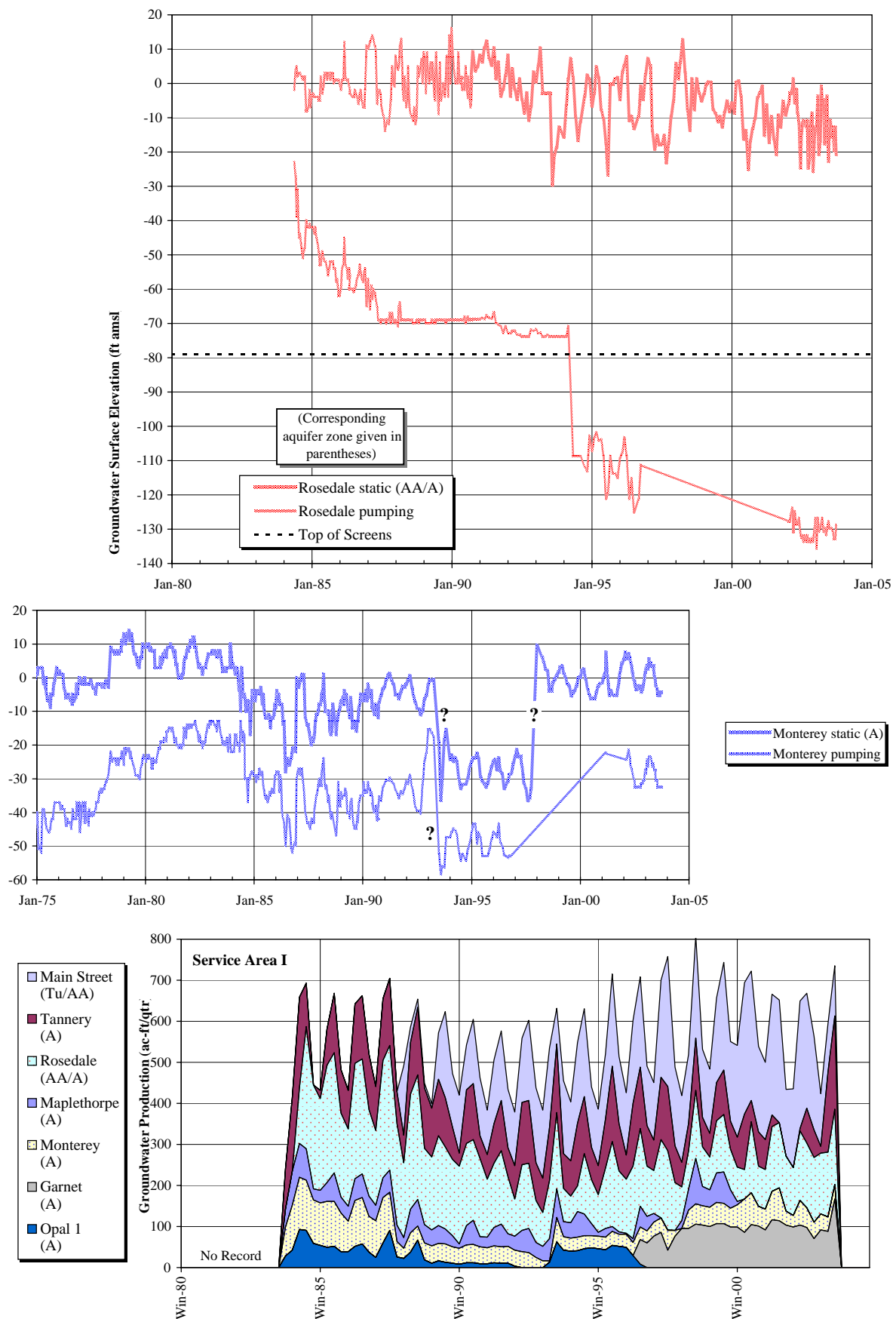


Figure 4-14
Rosedale and Monterey Well Hydrographs and Pumping

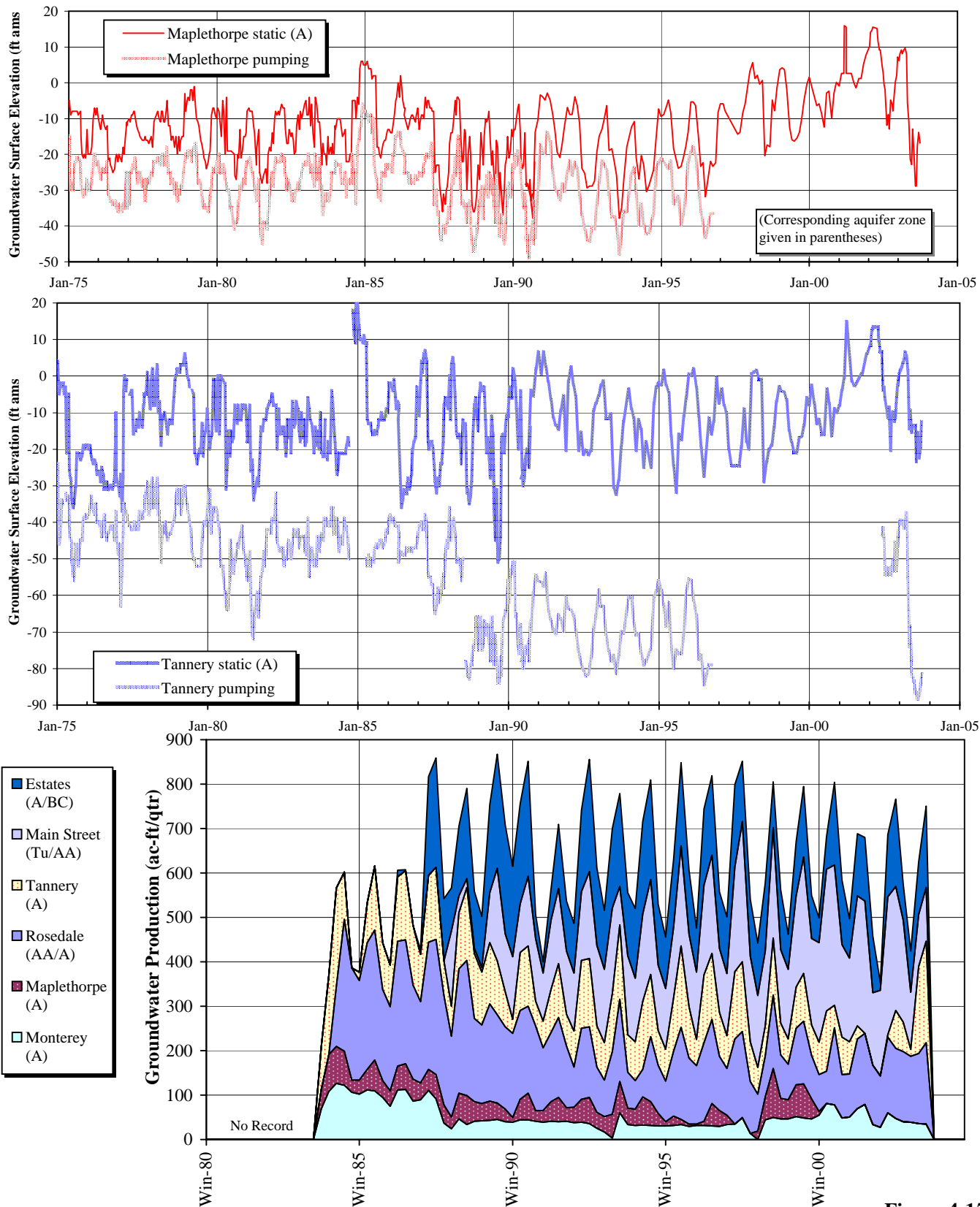


Figure 4-15
Maplethorpe and Tannery Well Hydrographs and Pumping

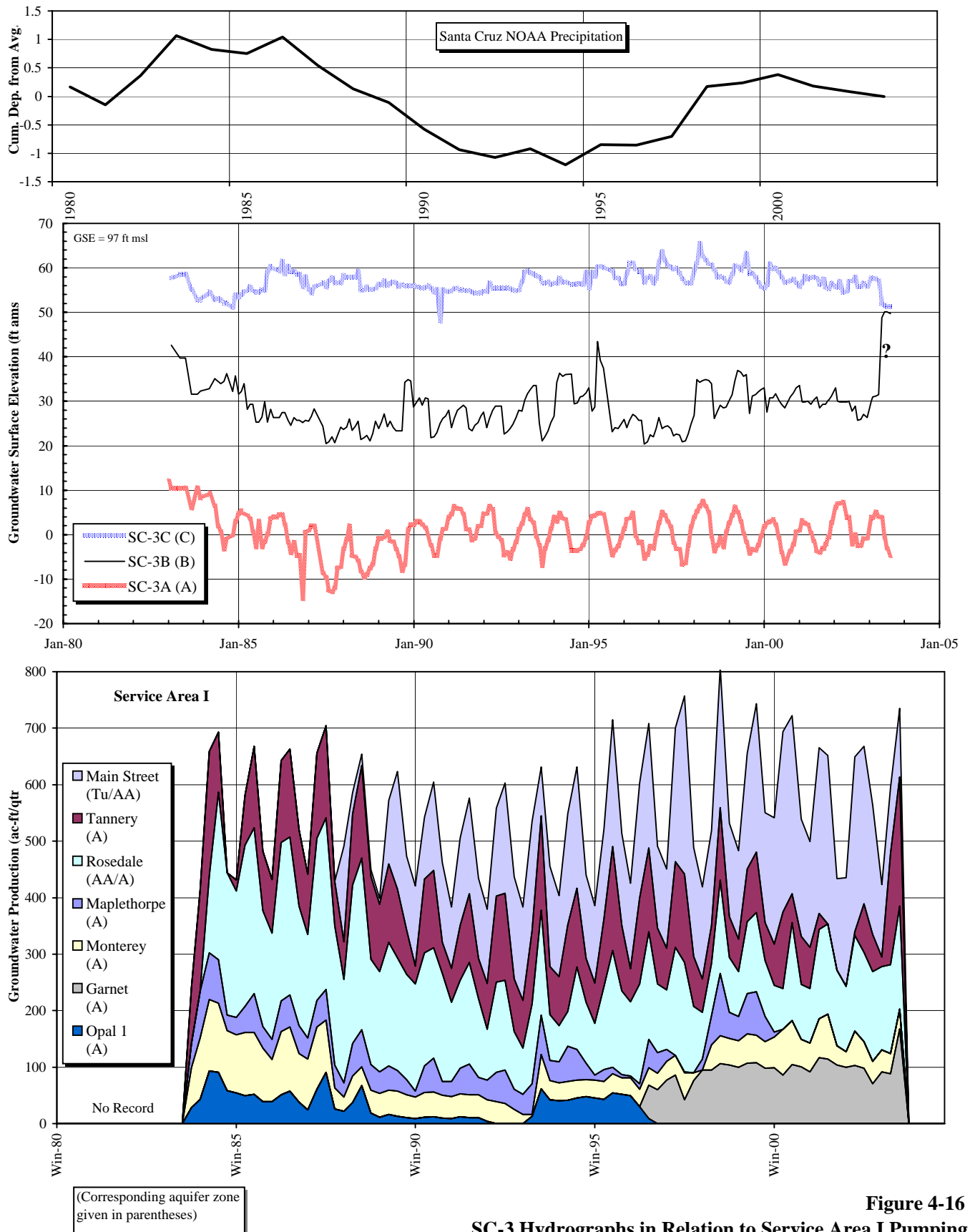


Figure 4-16
SC-3 Hydrographs in Relation to Service Area I Pumping

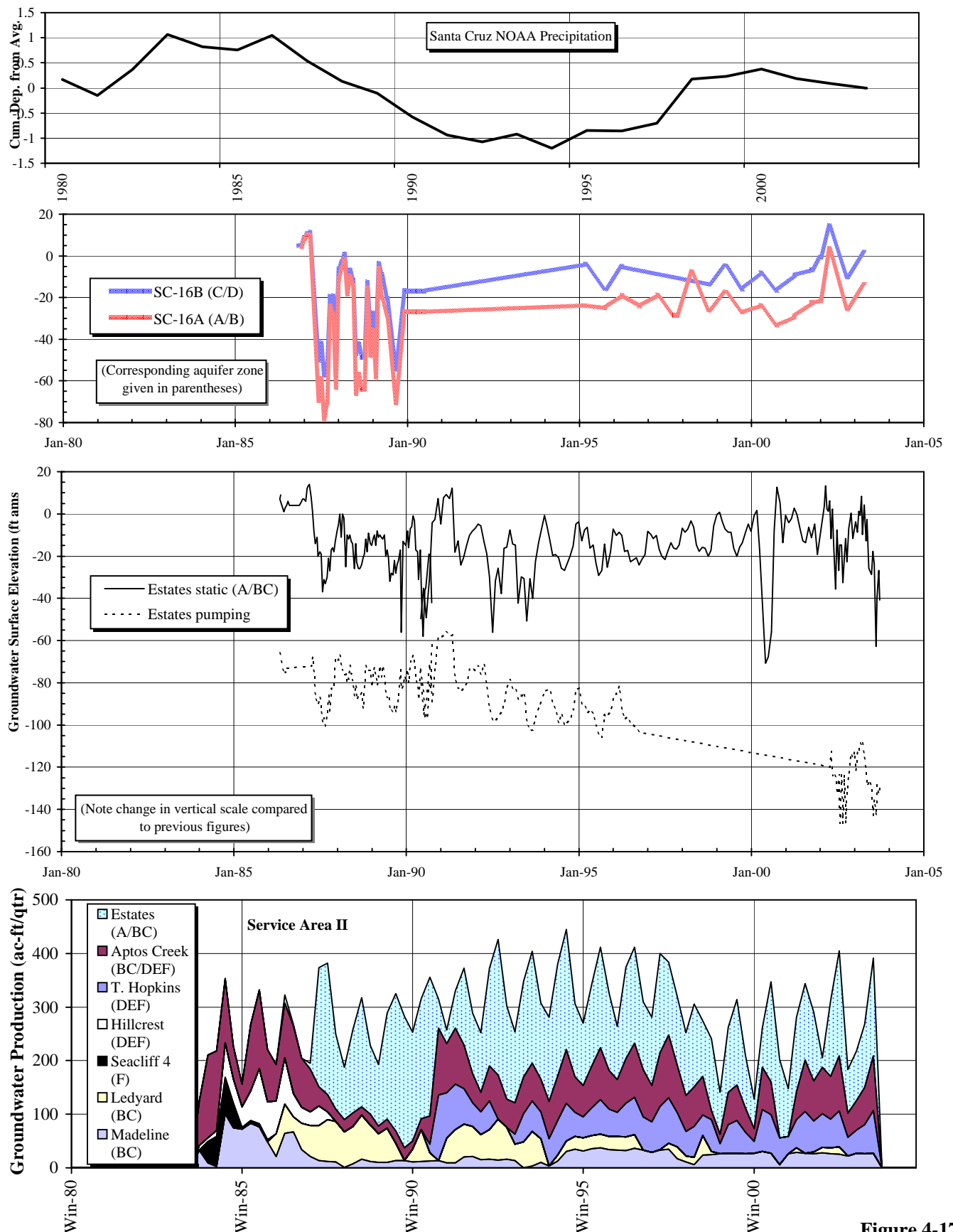


Figure 4-17
SC-16 and Estates Well Hydrographs in Relation to Service Area II Pumping

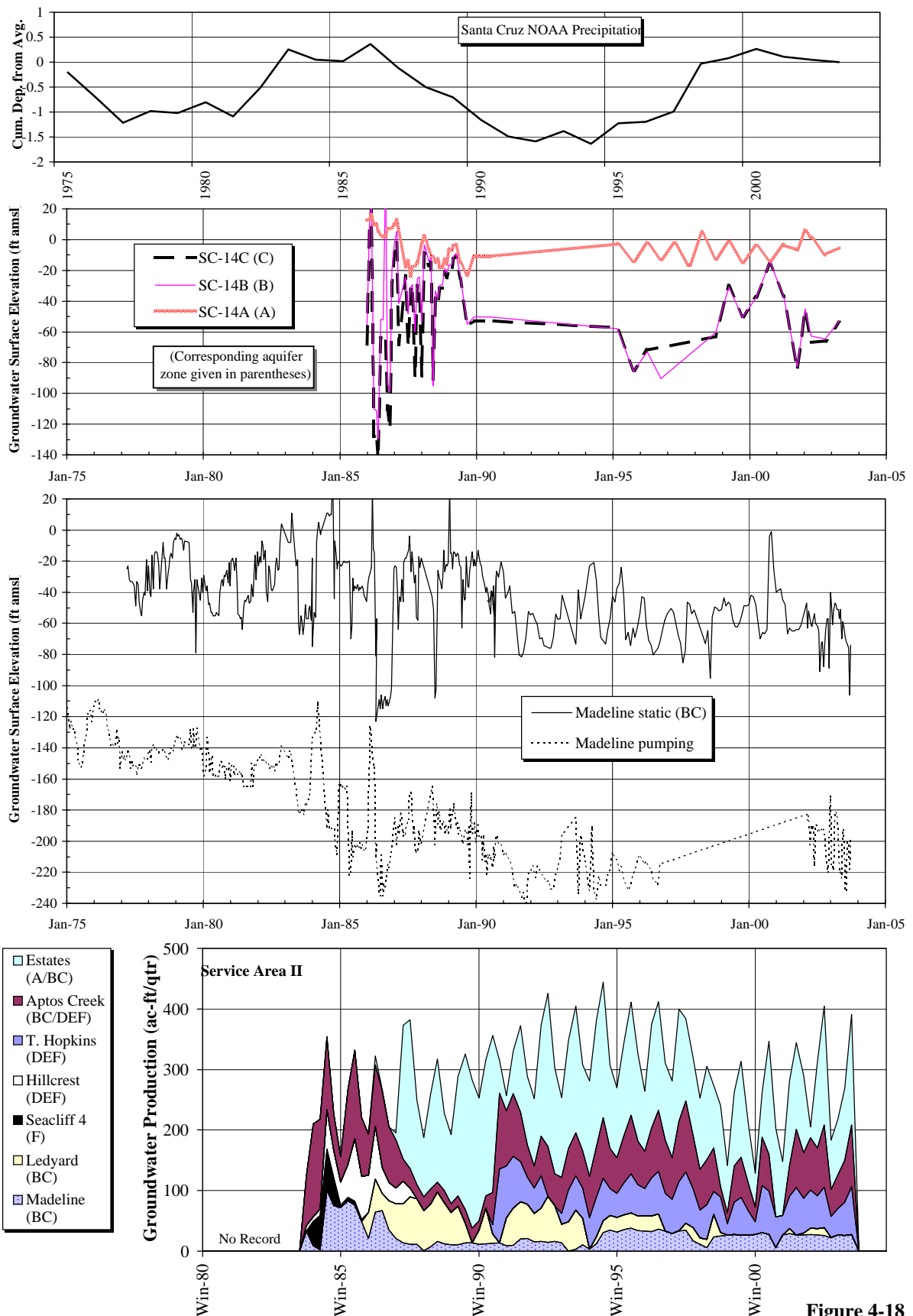


Figure 4-18

SC-14 and Madeline Well Hydrographs in Relation to Service Area II Pumping

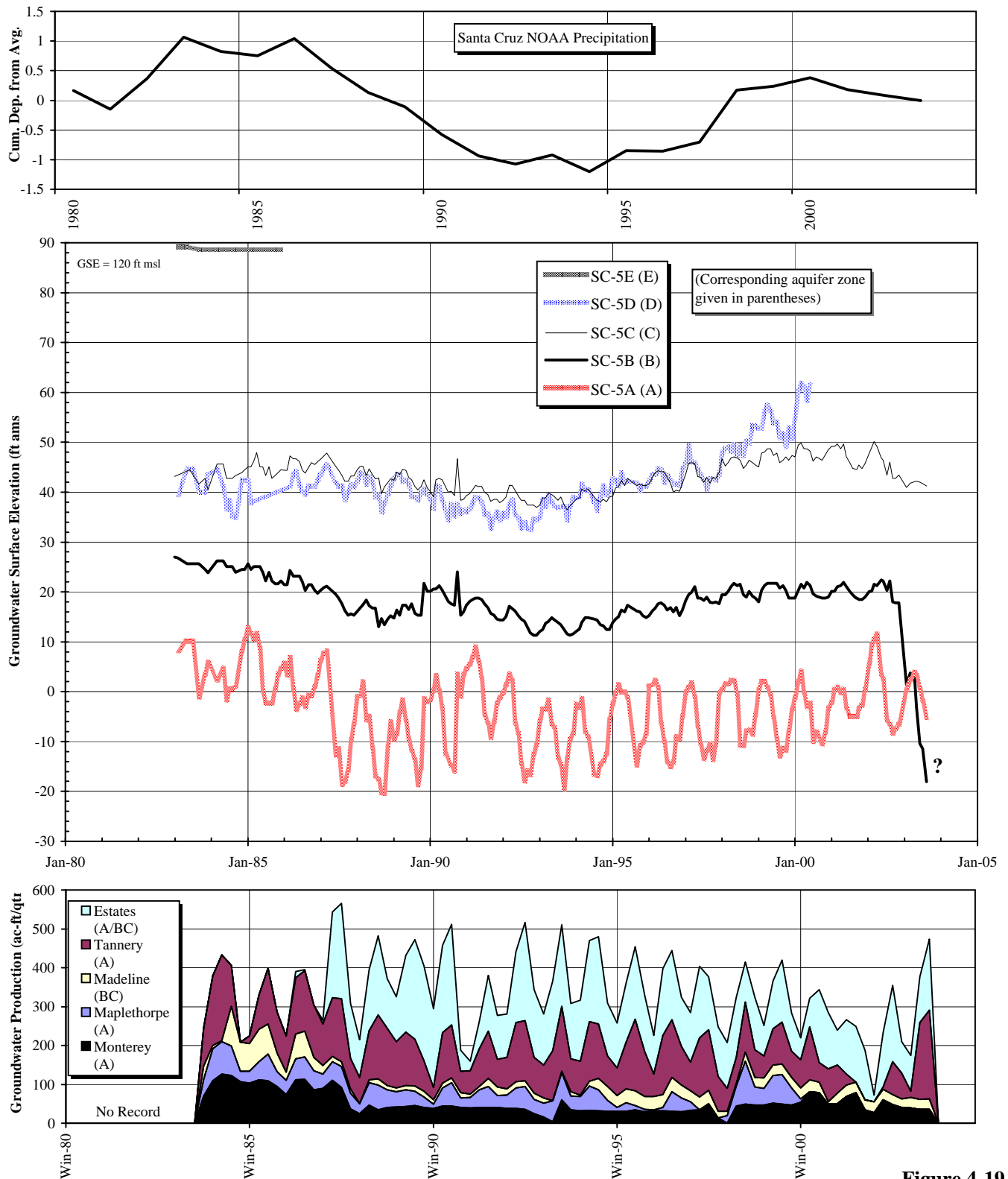


Figure 4-19
SC-5 Hydrographs in Relation to Monterey, Tannery, Maplethorpe, Estates, and Madeline Pumping

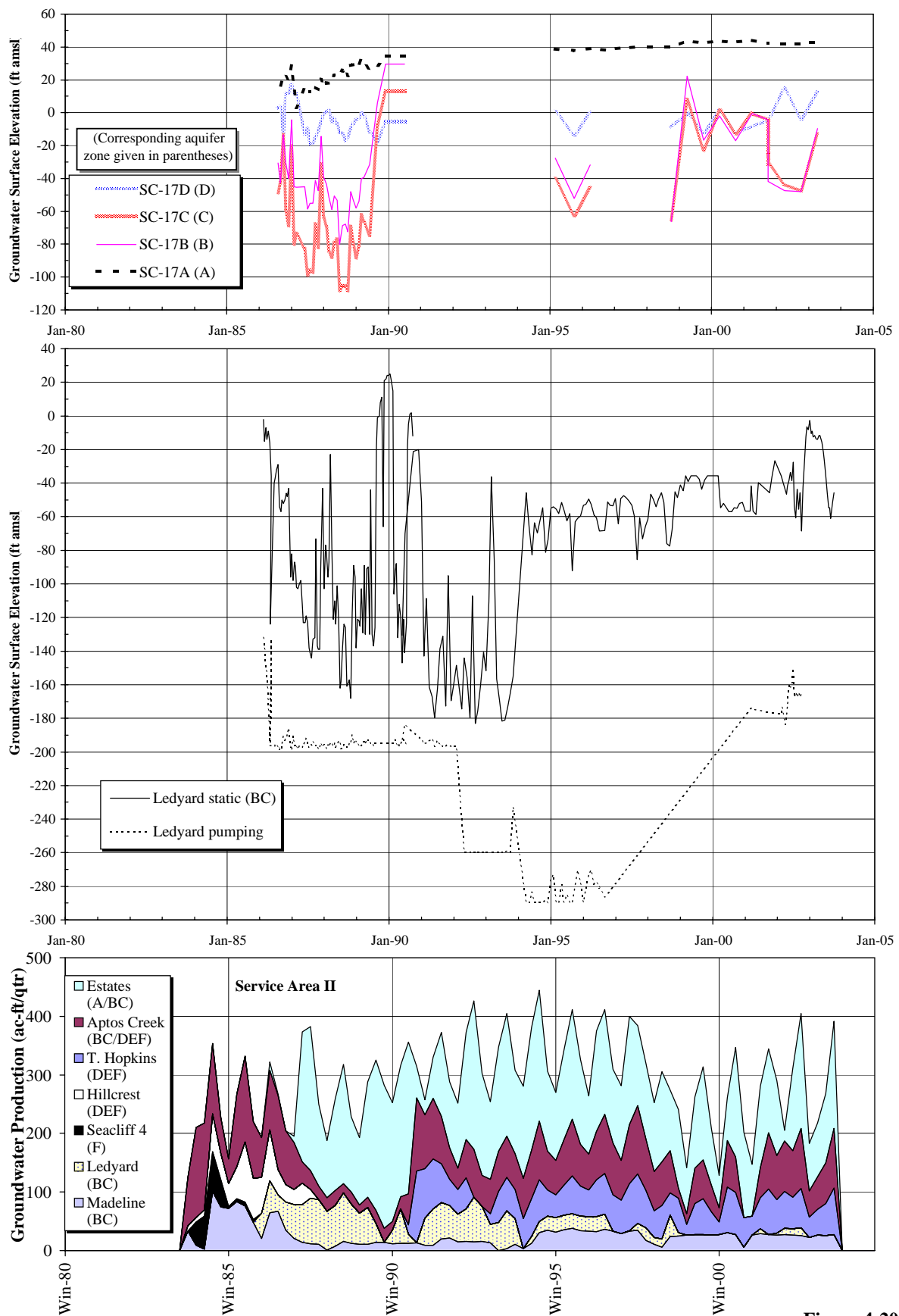


Figure 4-20
SC-17 and Ledyard Well Hydrographs in Relation to Service Area II Pumping

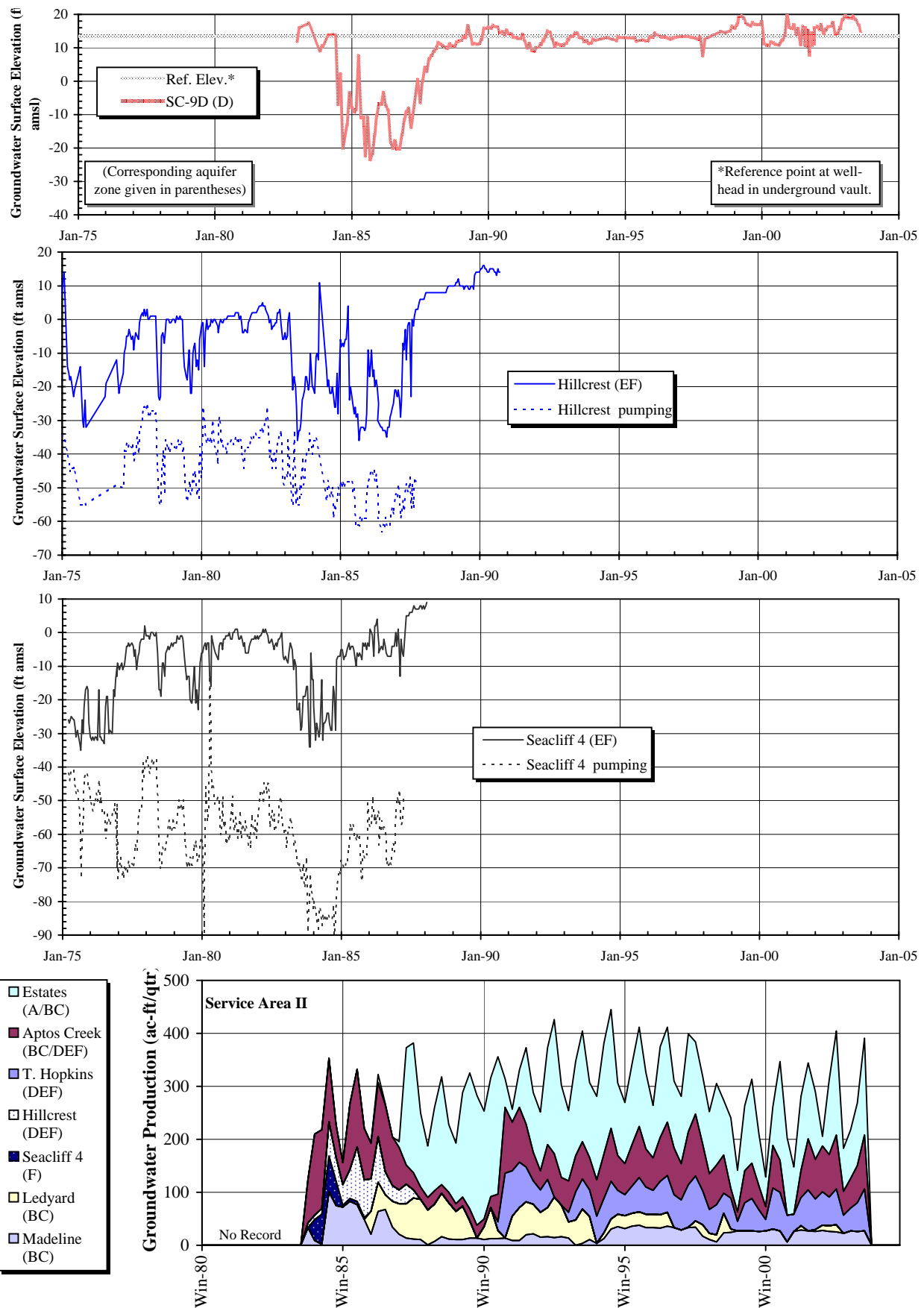


Figure 4-21
Hillcrest, Seaciff 4, and SC-9D Hydrographs in Relation to Service Area II Pumping

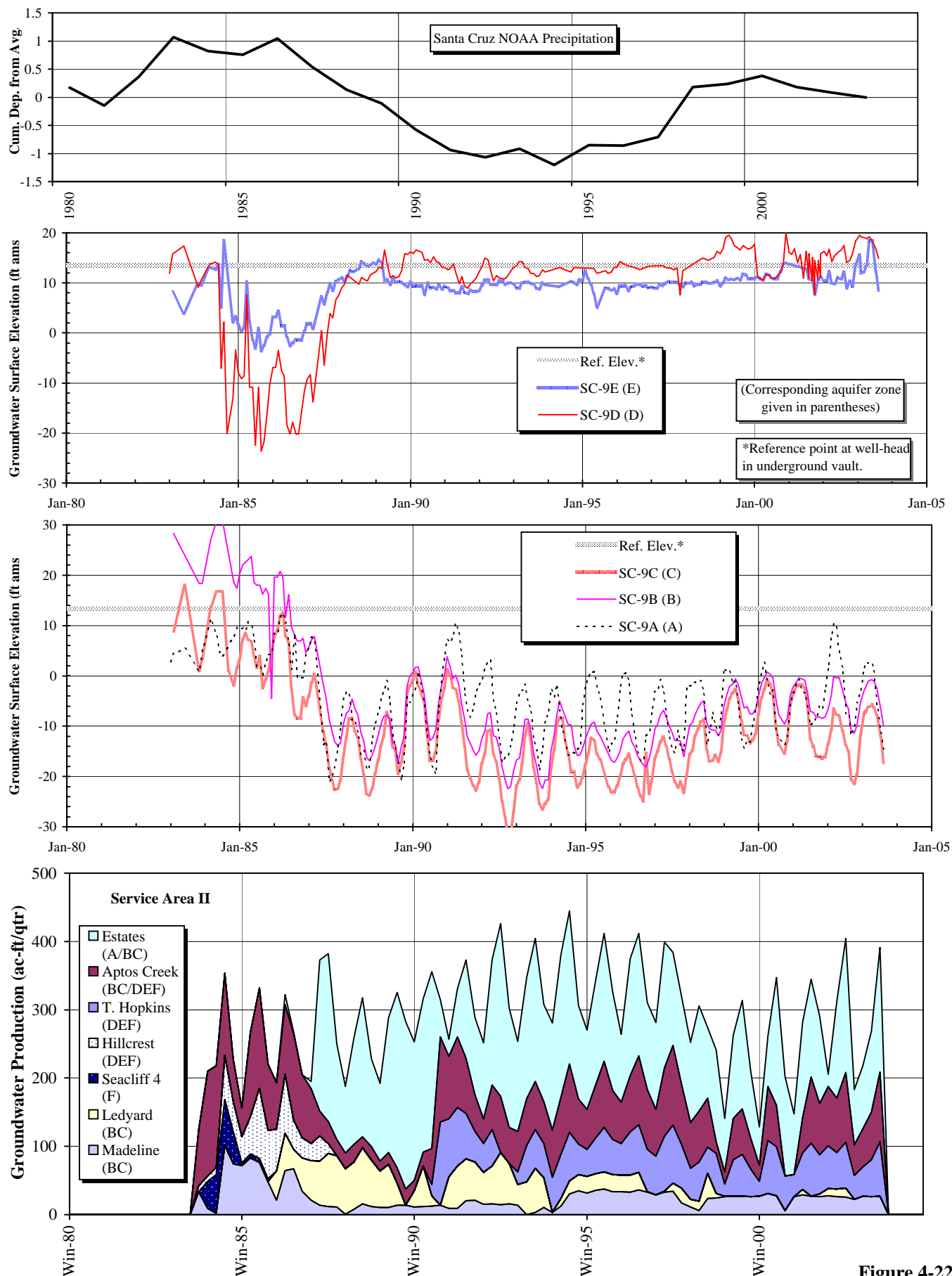


Figure 4-22
SC-9 Hydrographs in Relation to Service Area II Pumping

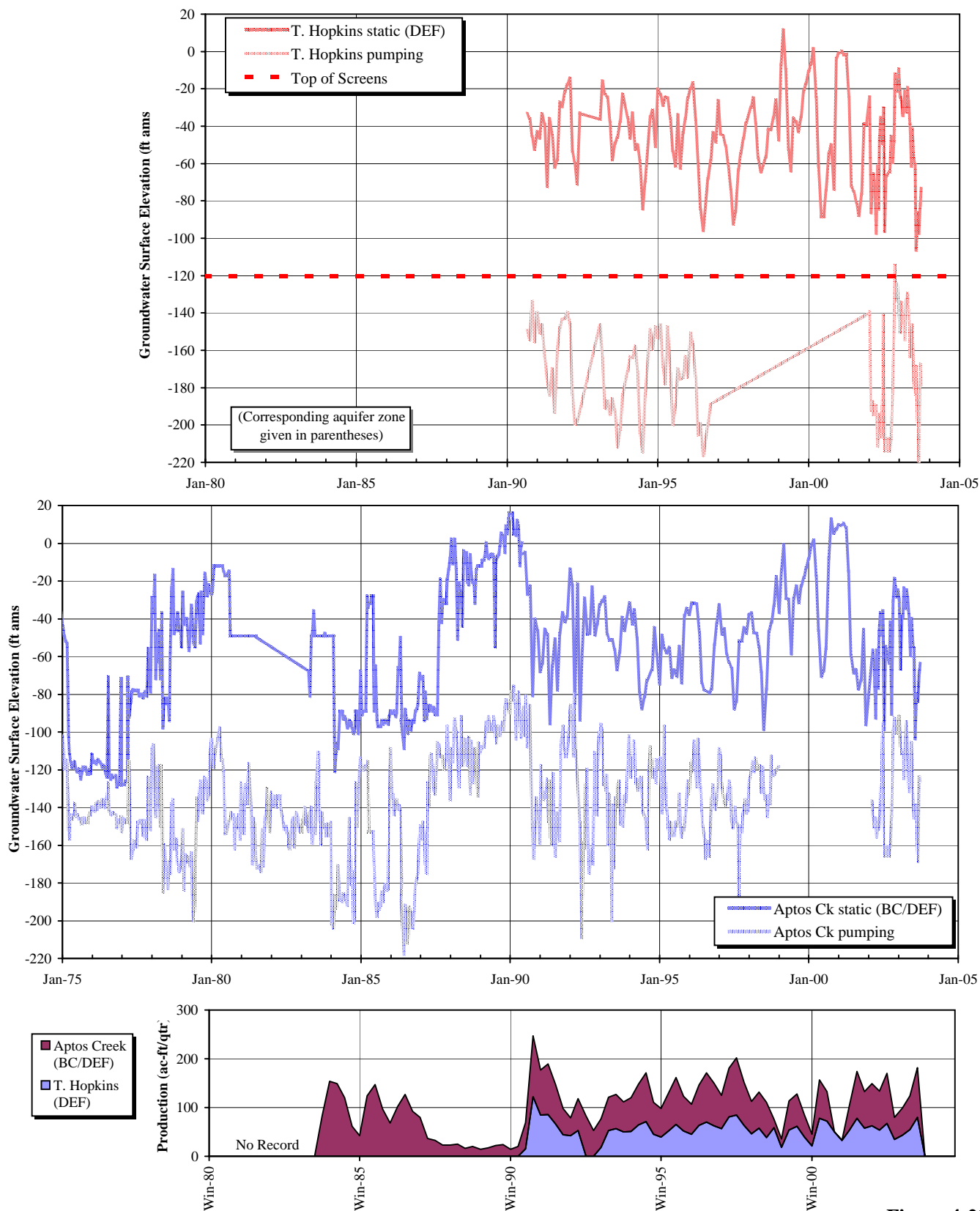


Figure 4-23
Aptos Creek and T. Hopkins Well Hydrographs and Pumping

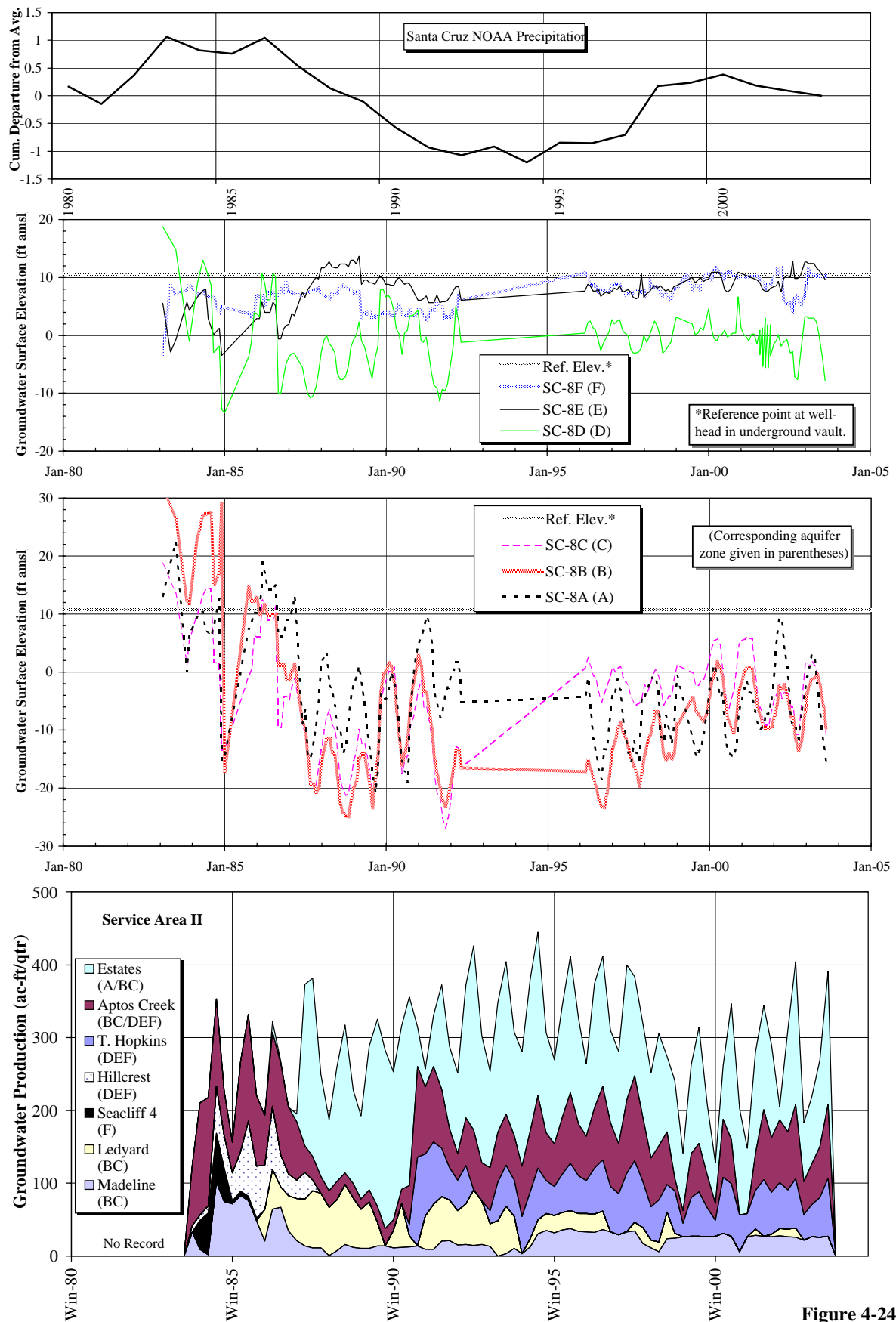


Figure 4-24
SC-8 Hydrographs in Relation to Service Area II Pumping

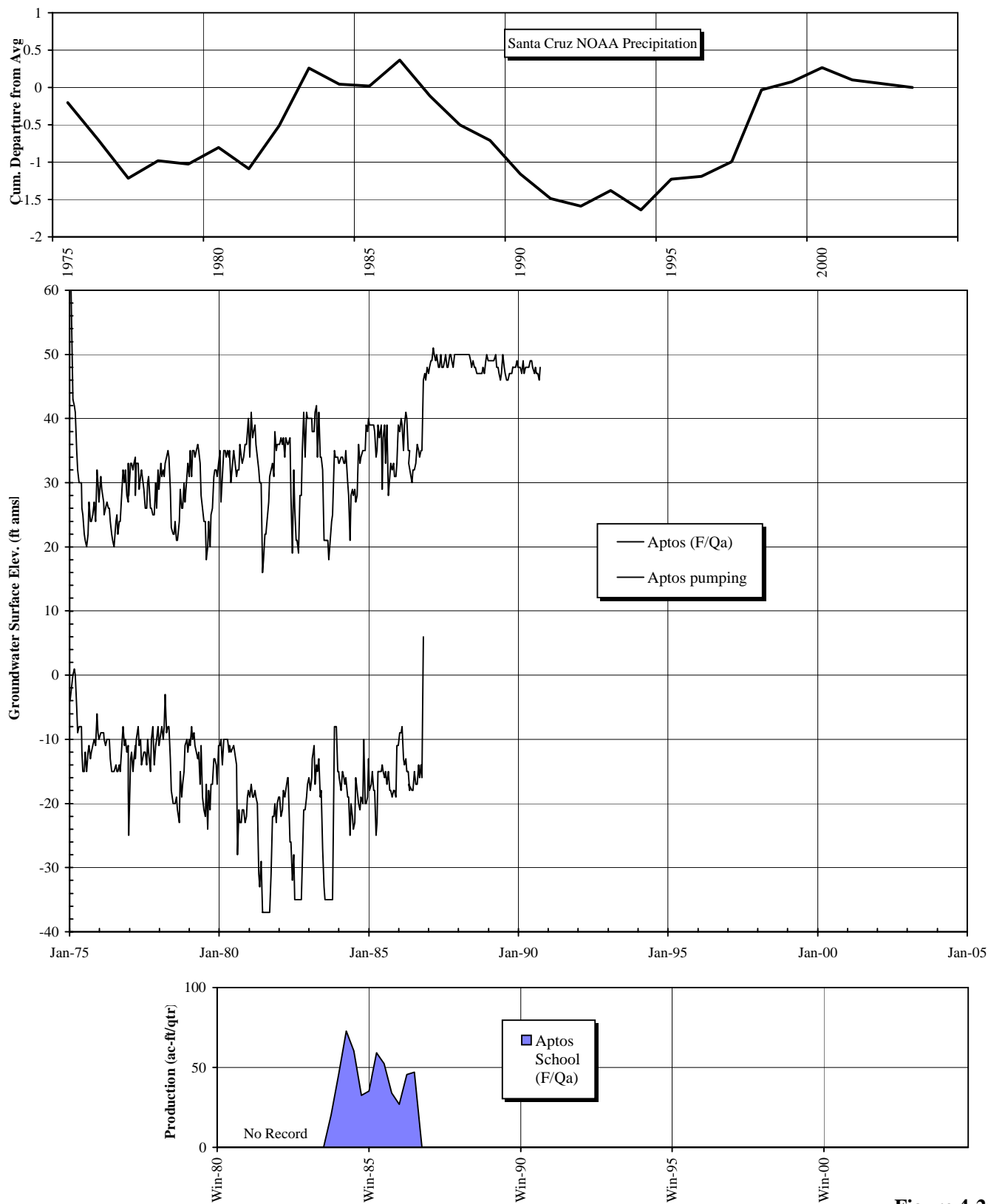


Figure 4-25
Aptos Jr. High School Well Hydrograph and Pumping

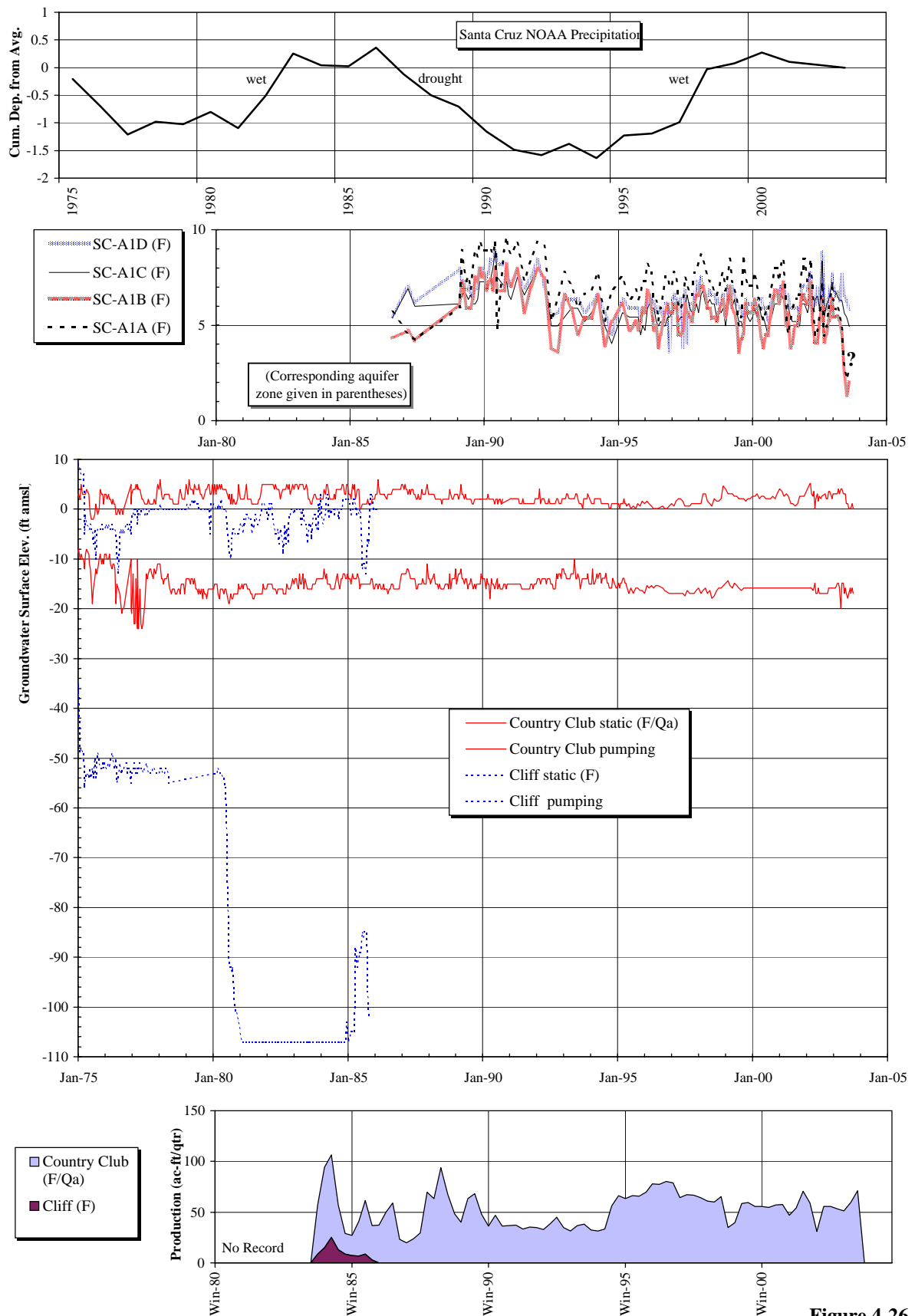


Figure 4-26
SC-A1, Cliff, and Country Club Well Hydrographs in Relation to Cliff and Country Club Pumping

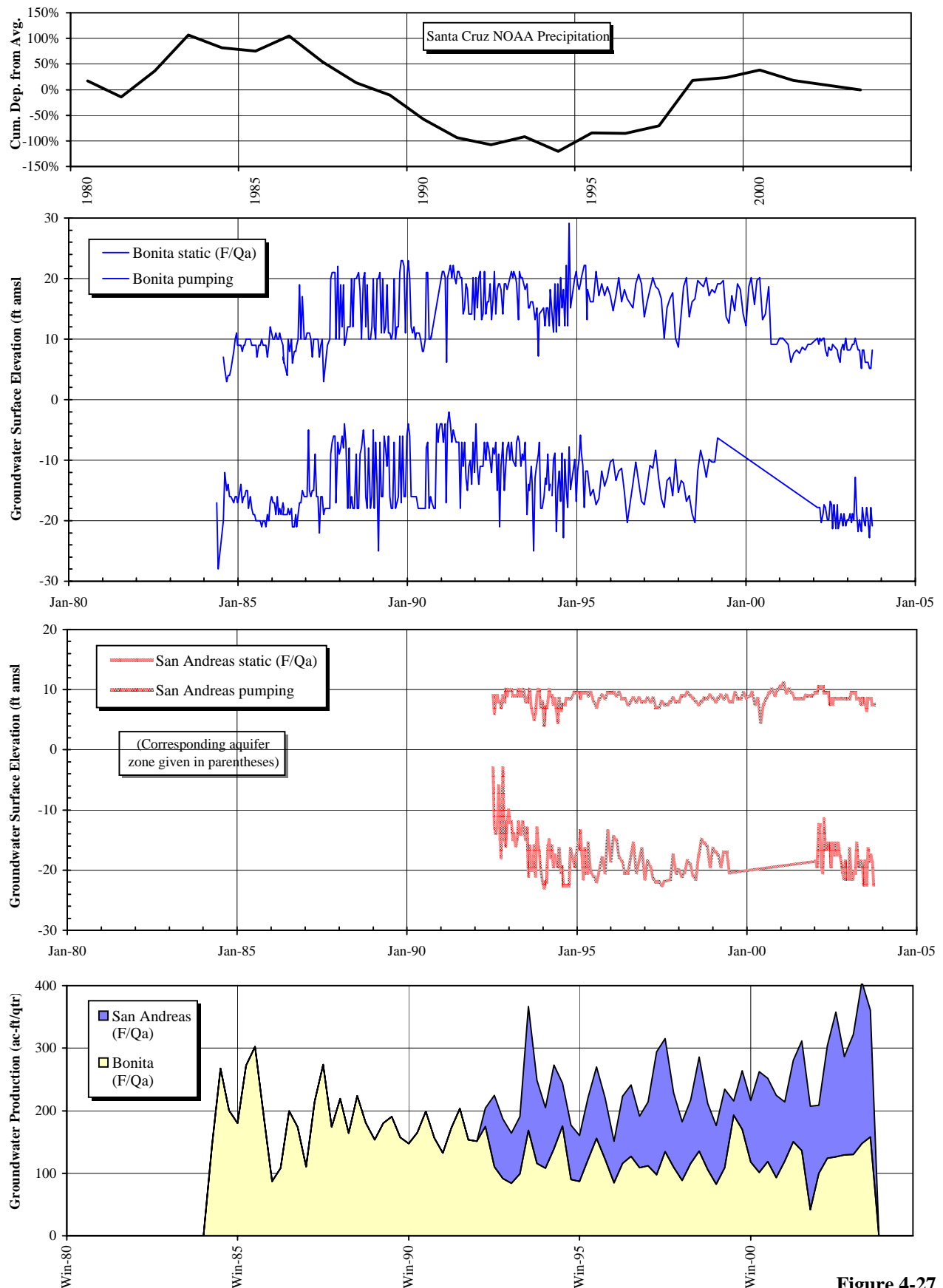


Figure 4-27
Bonita and San Andreas Well Hydrographs and Pumping

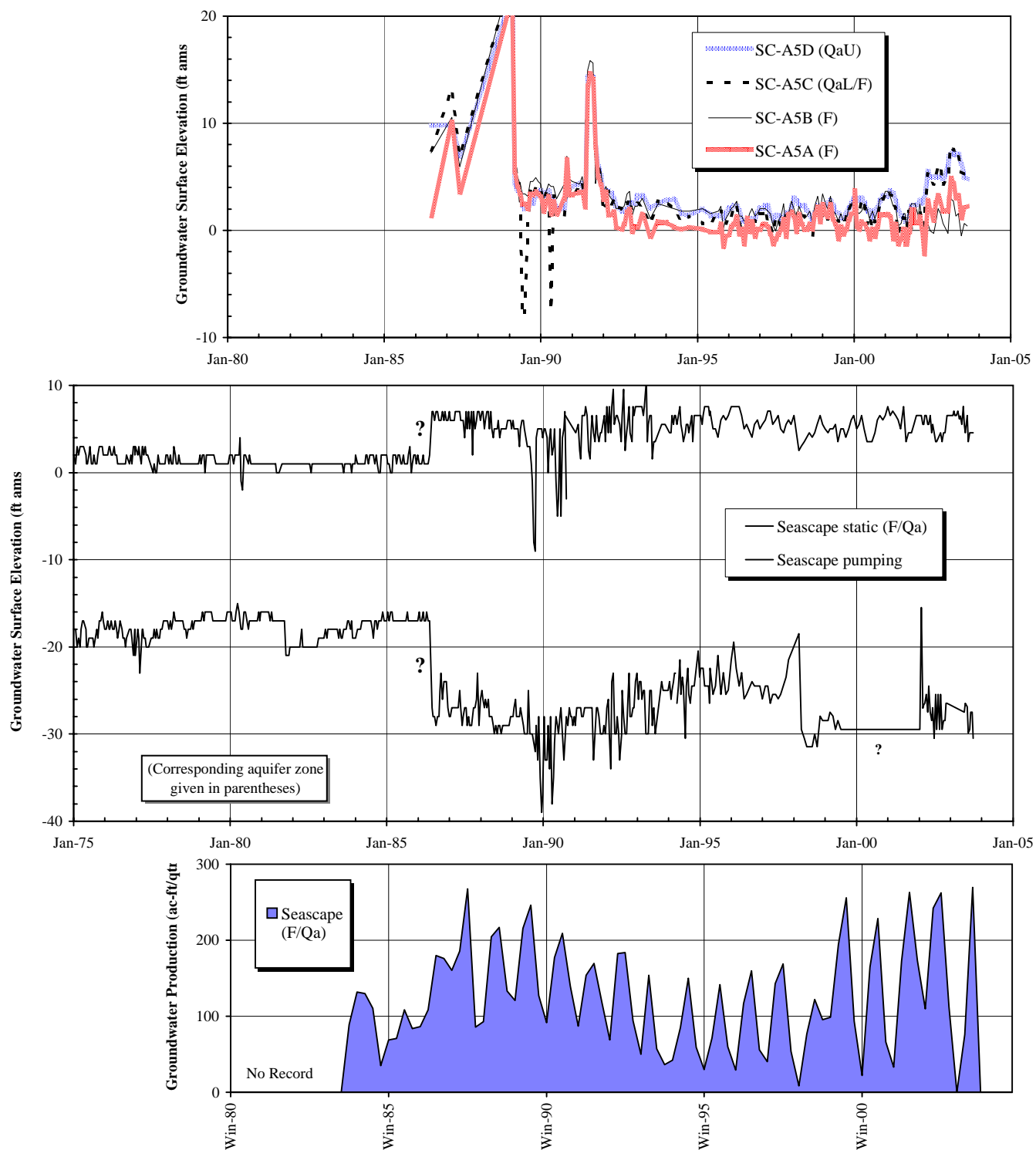


Figure 4-28
SC-A5 and Seascape Hydrographs in Relation to Seascape Pumping

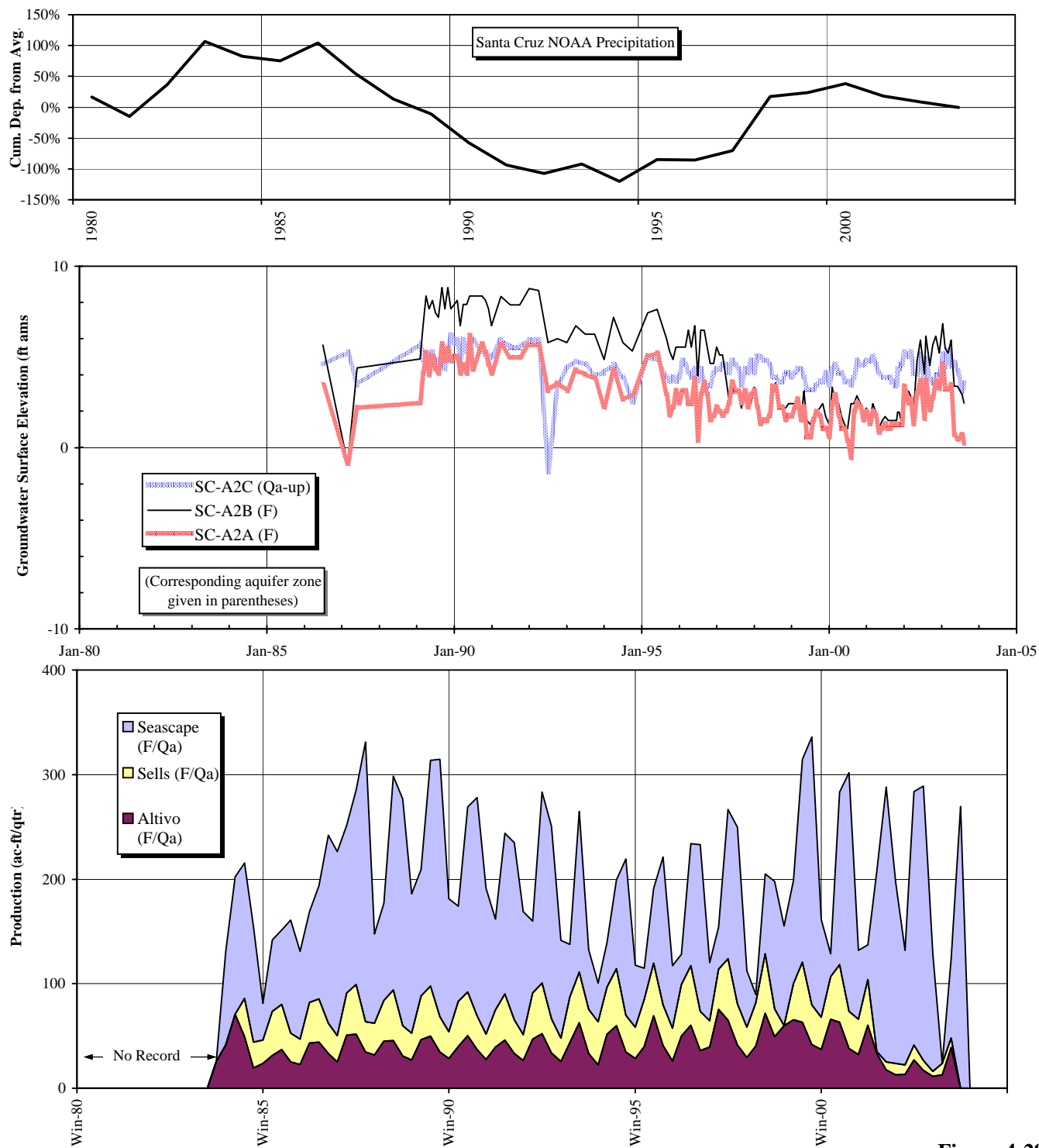


Figure 4-29
SC-A2 Hydrographs in Relation to Seascap Pumping

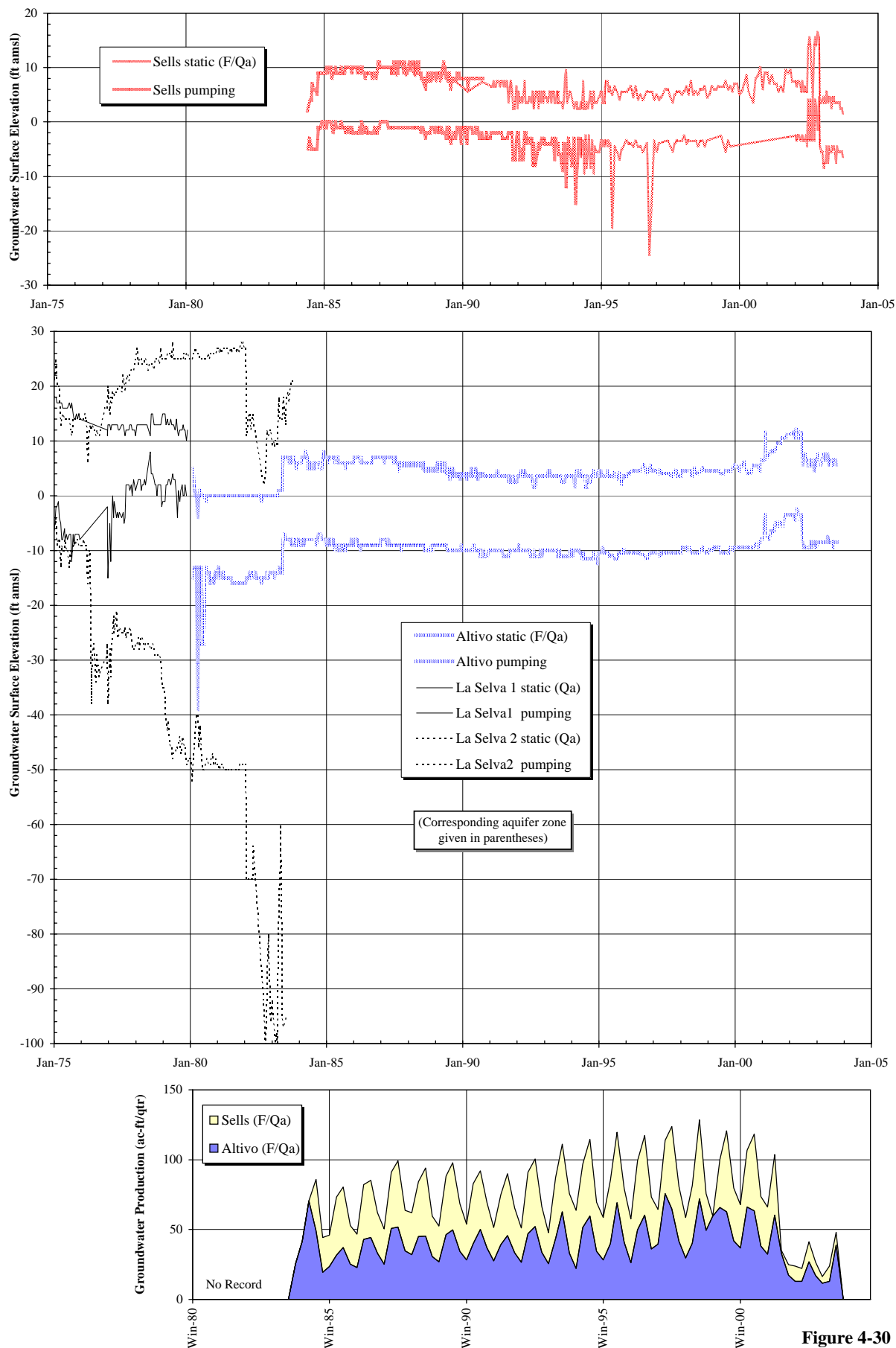


Figure 4-30
Altivo and Sells Hydrographs in Relation to Altivo and Sells Pumping

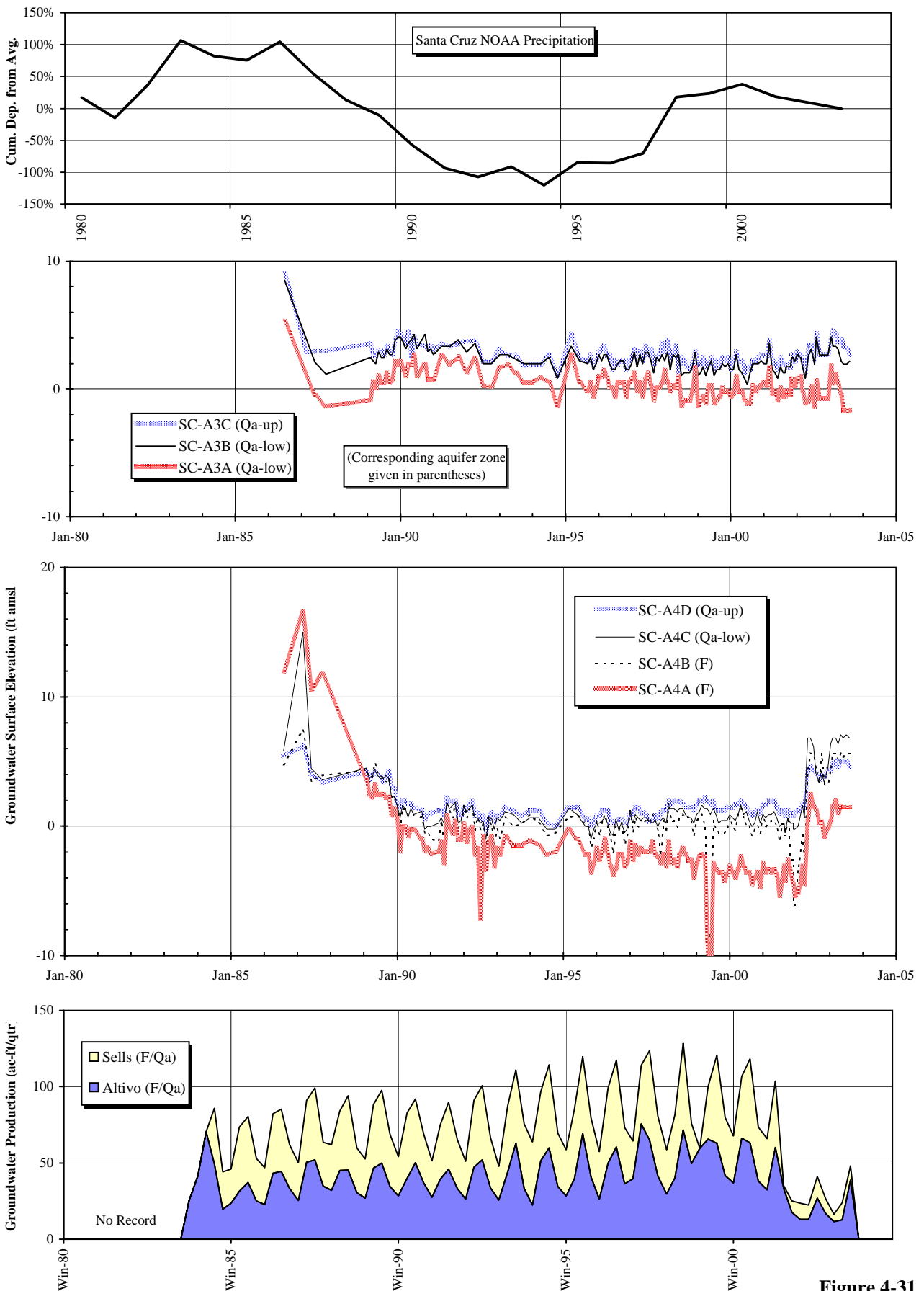


Figure 4-31
SC-A3 and SC-A4 Hydrographs in Relation to Alvito and Sells Pumping

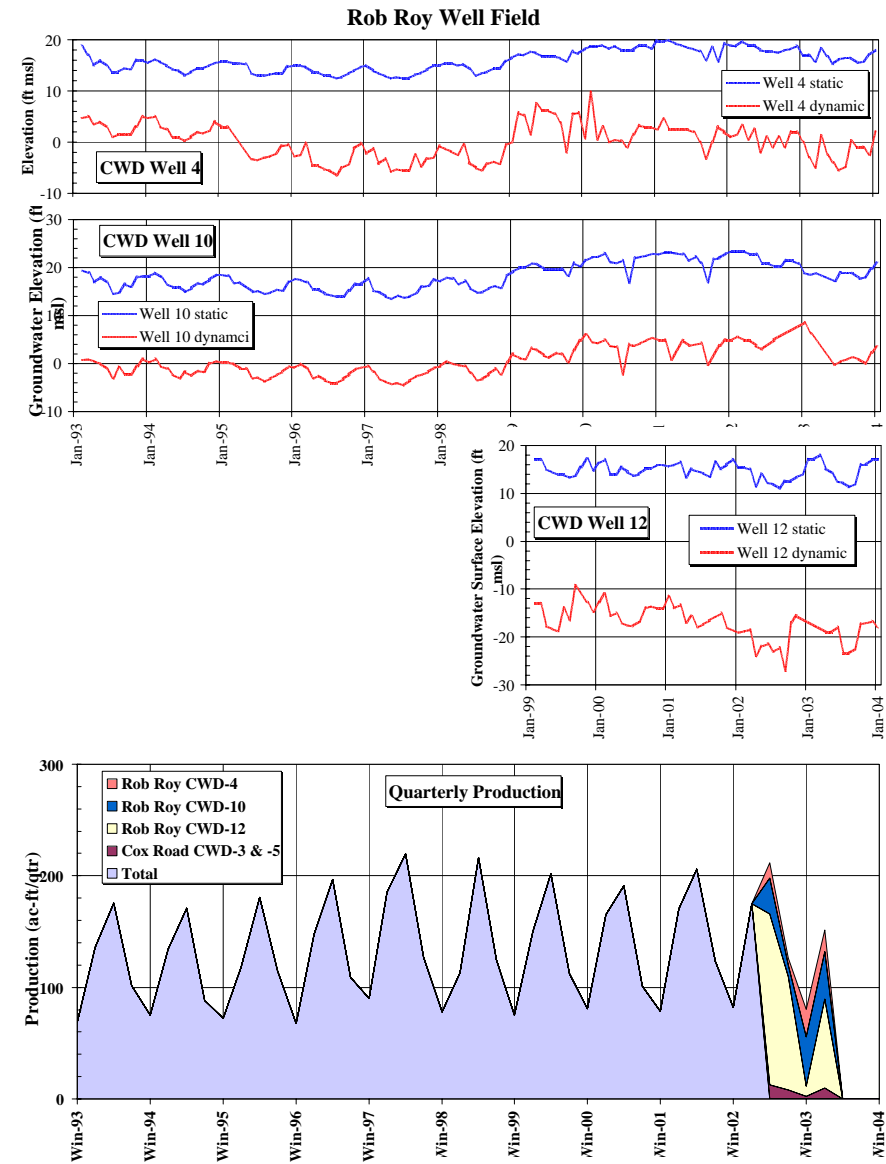
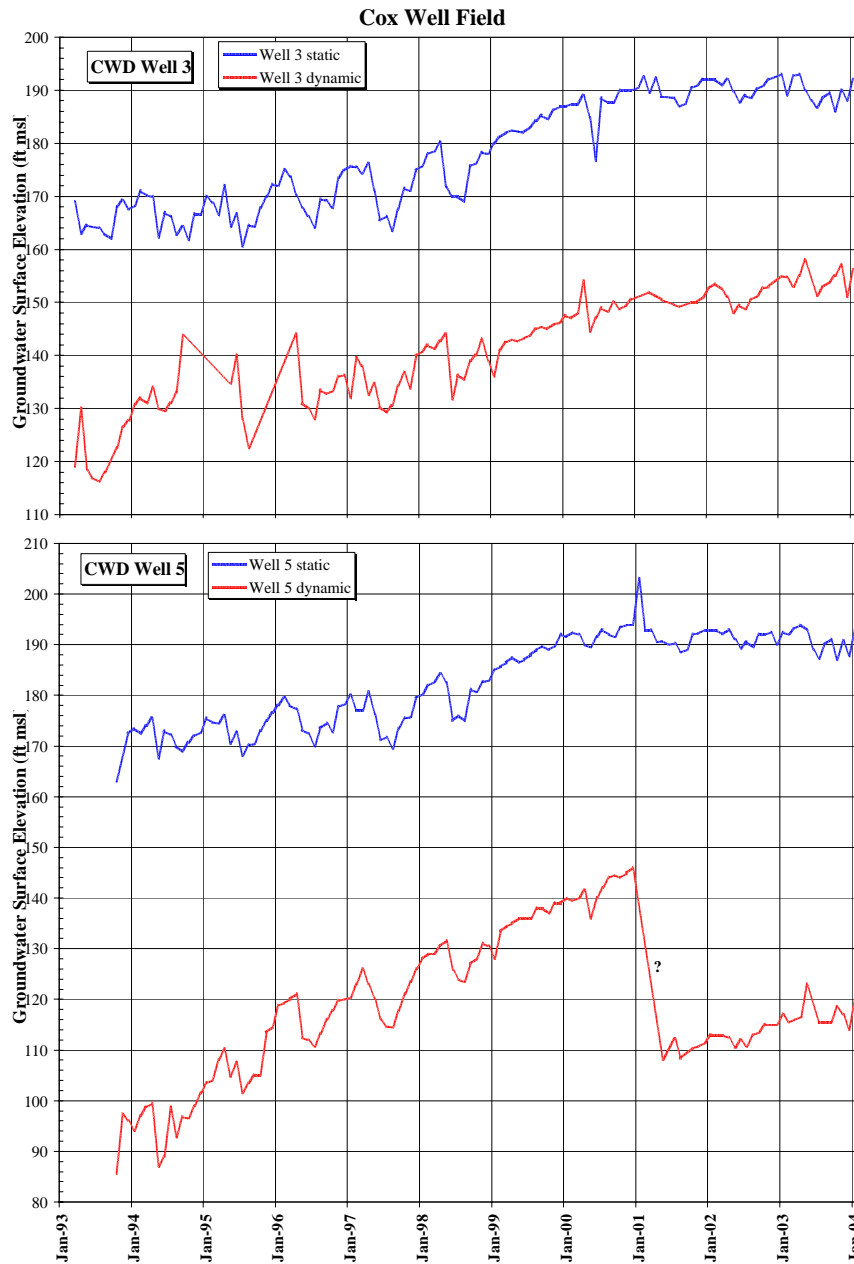
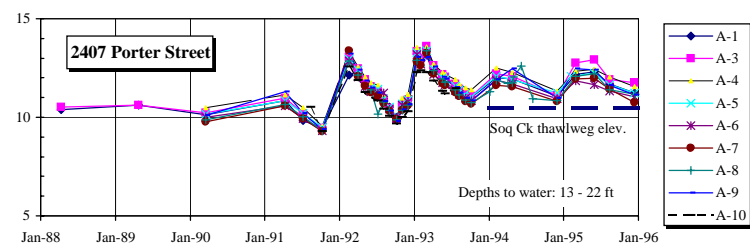
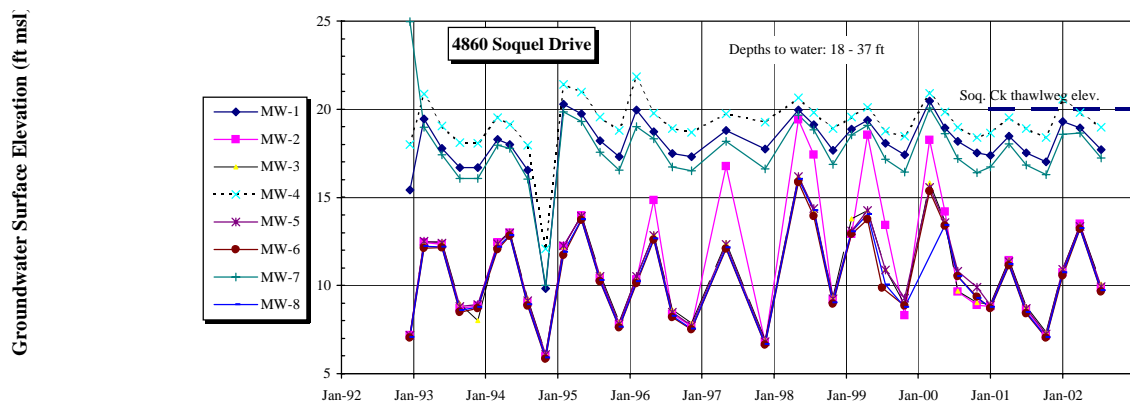
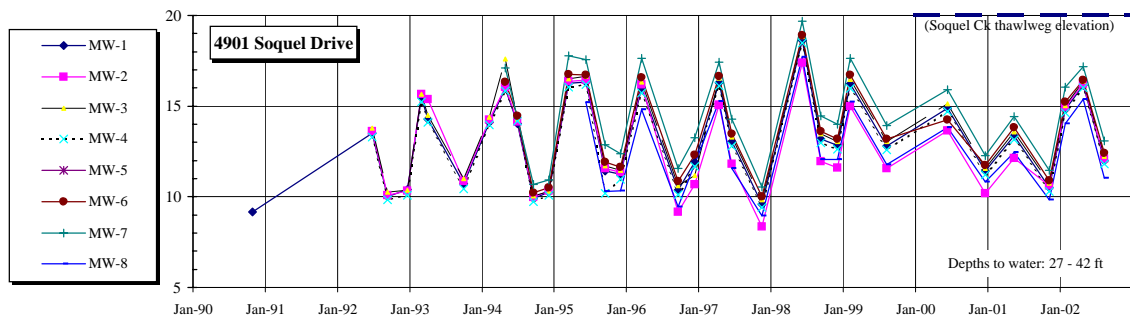


Figure 4-32
Central Water District Well Hydrographs



Site locations shown in Figure 4-6a.

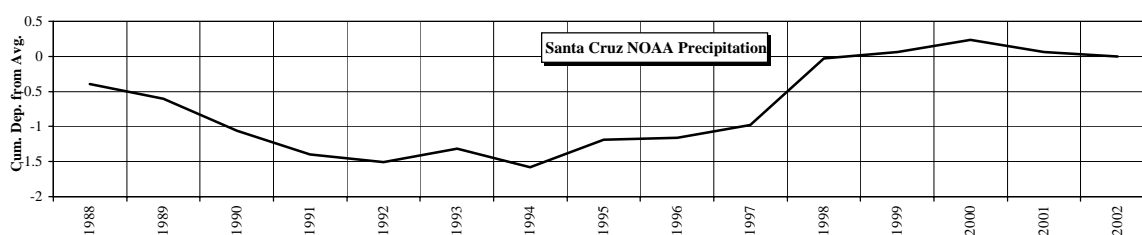
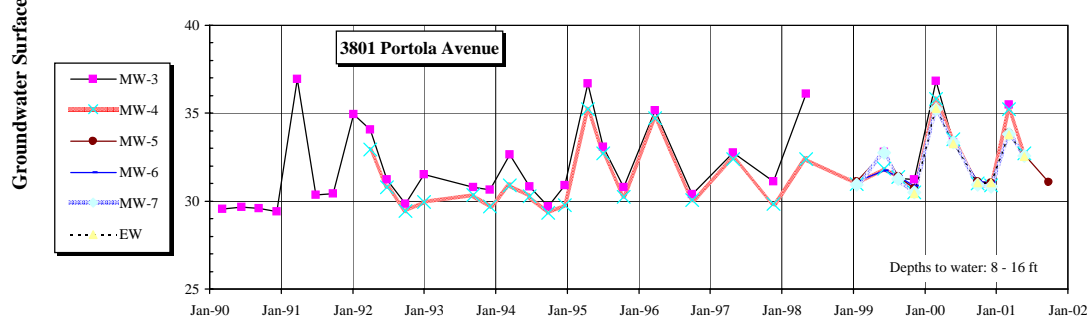
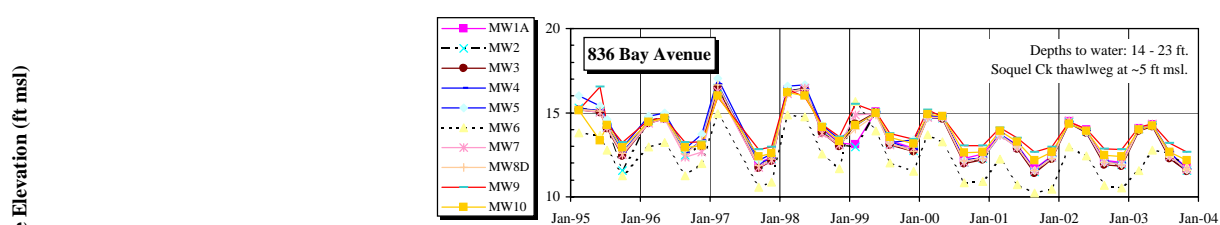
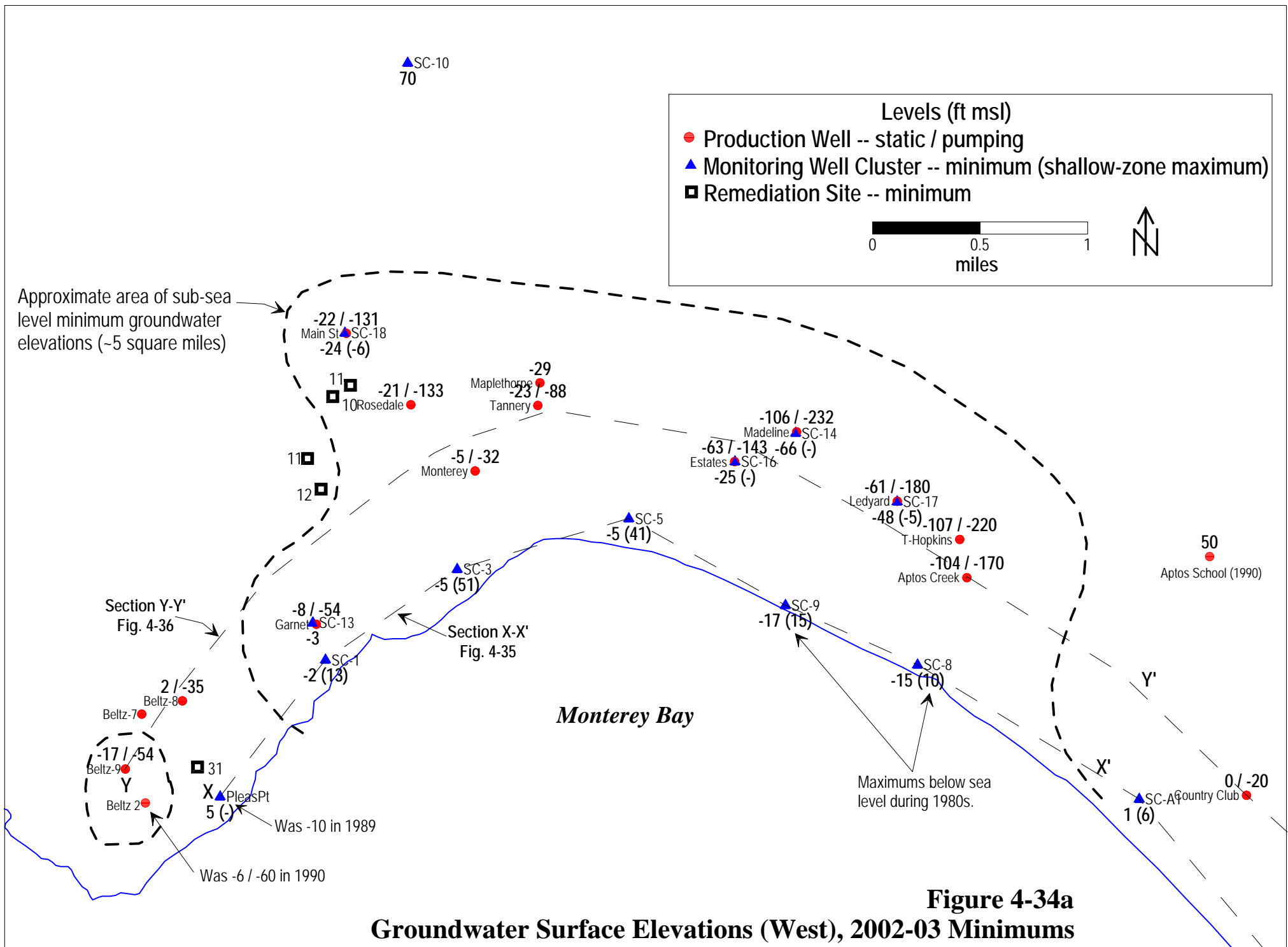
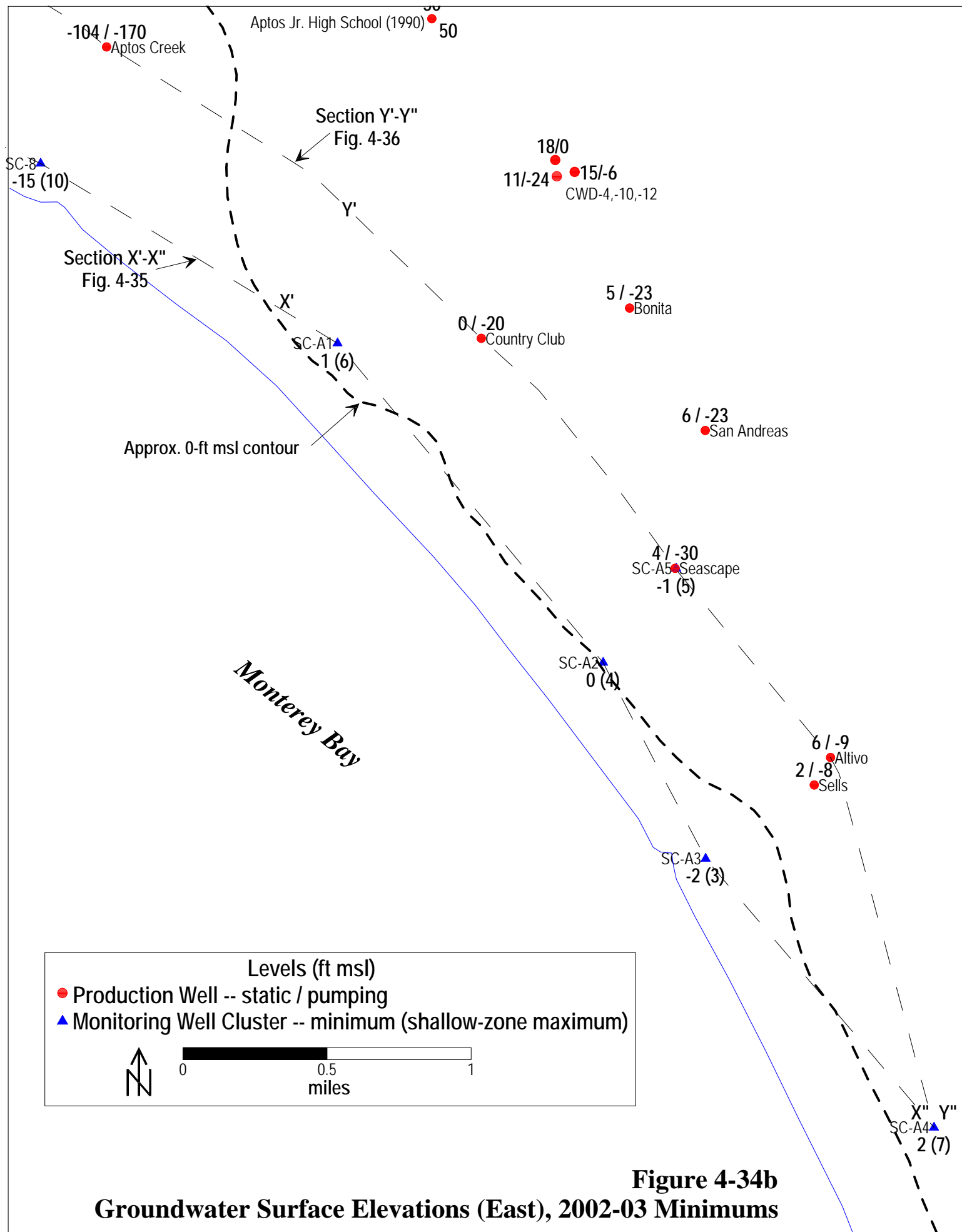


Figure 4-33
Groundwater Level Hydrographs for Selected Remediation Sites





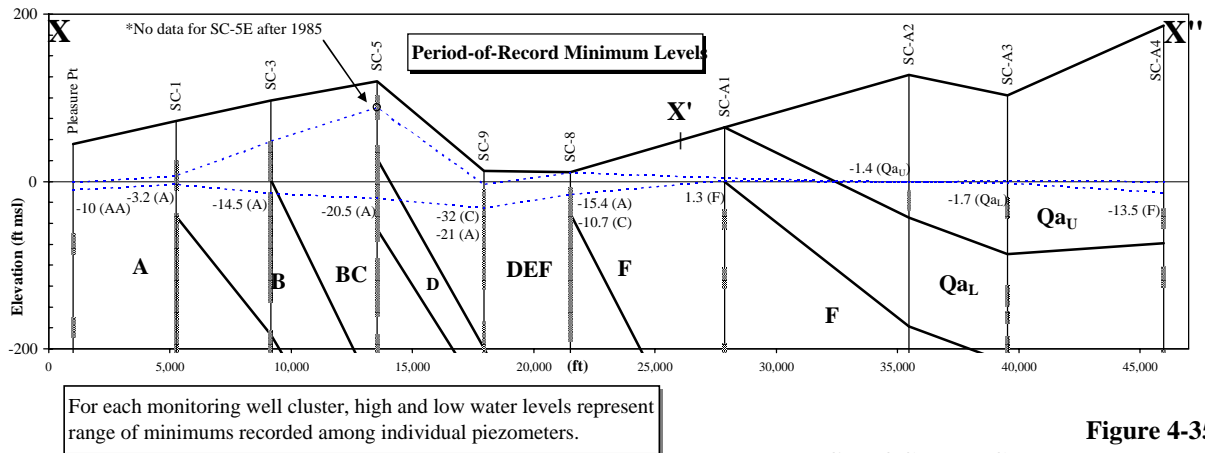
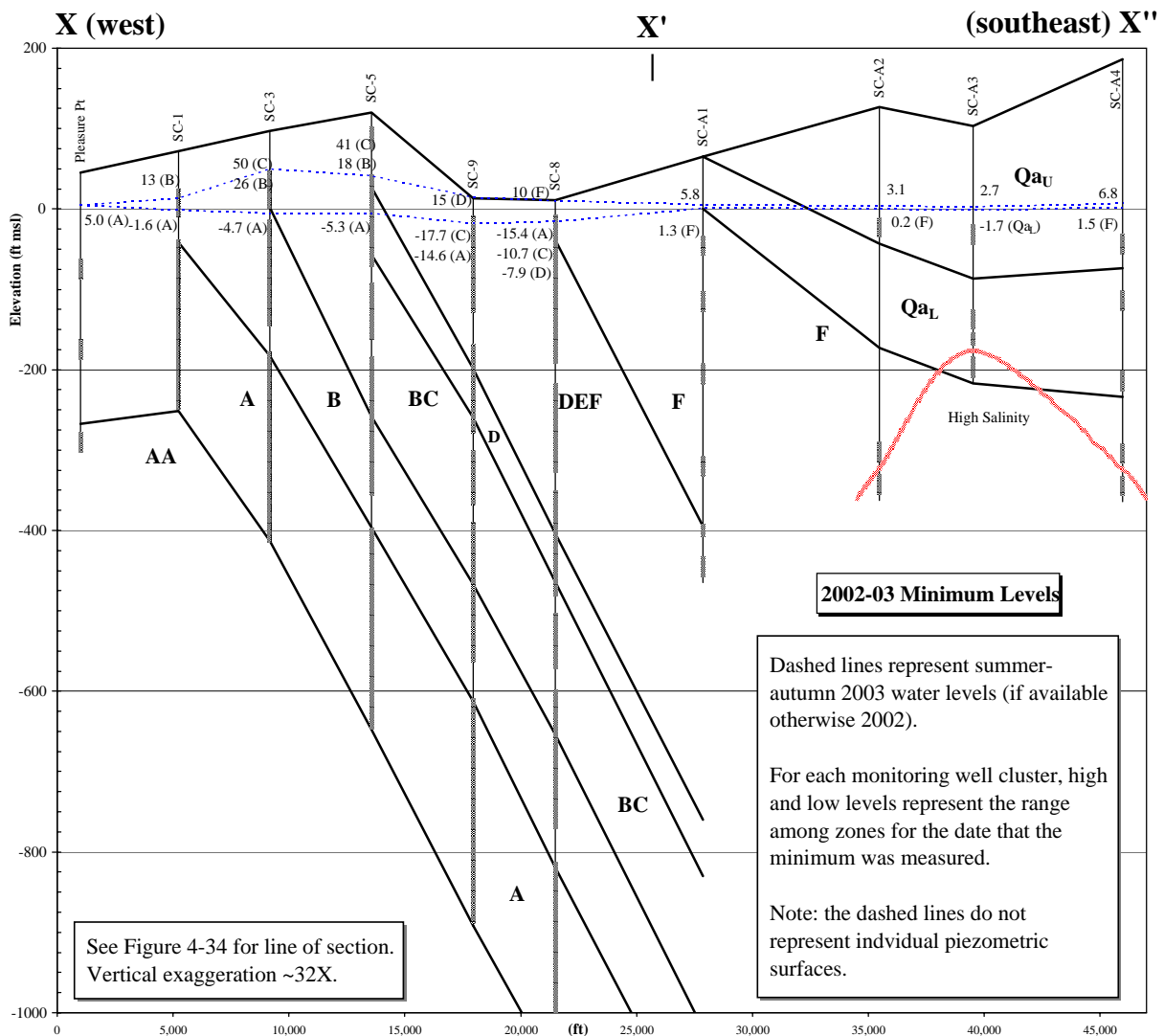


Figure 4-35
Profile of Coastal Groundwater Levels

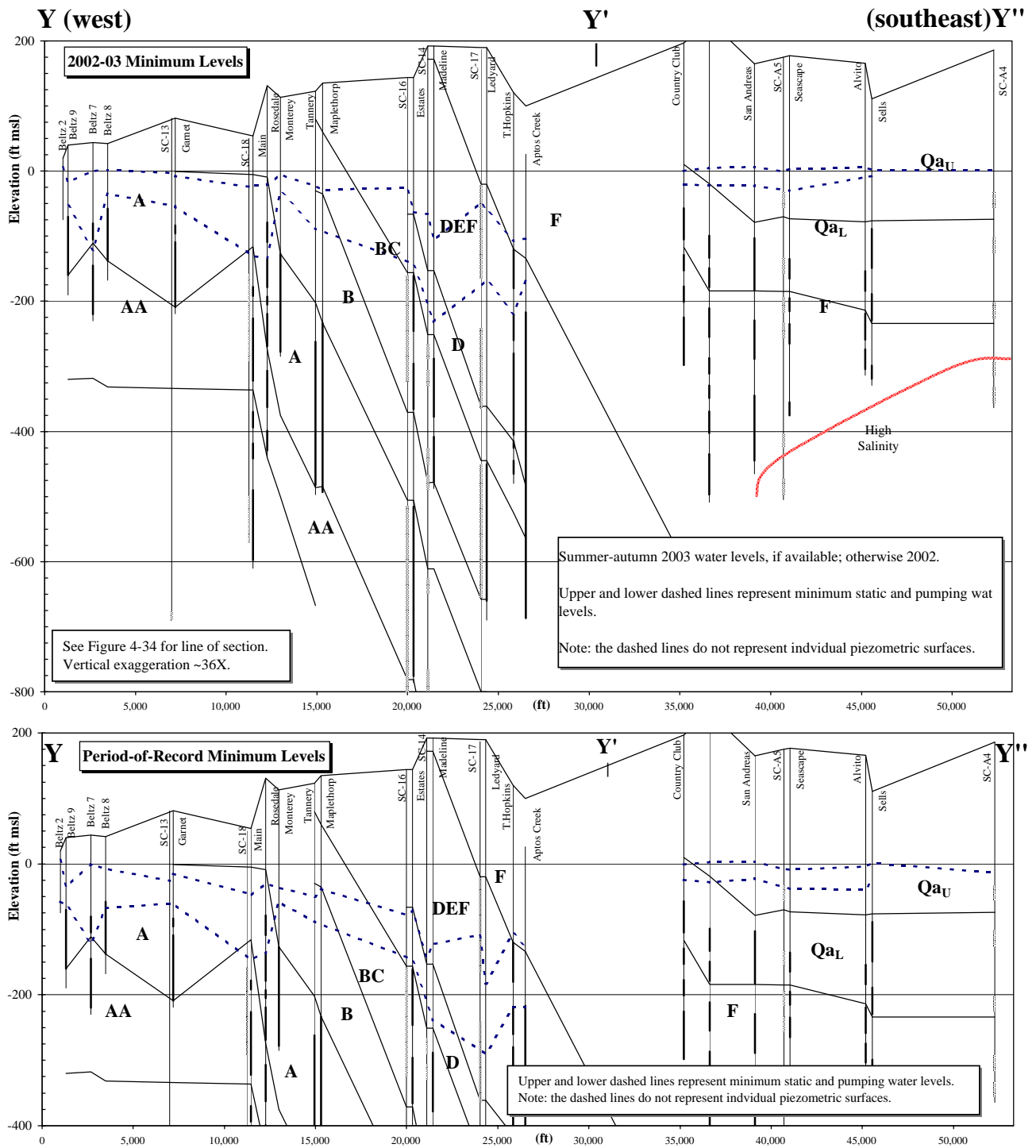
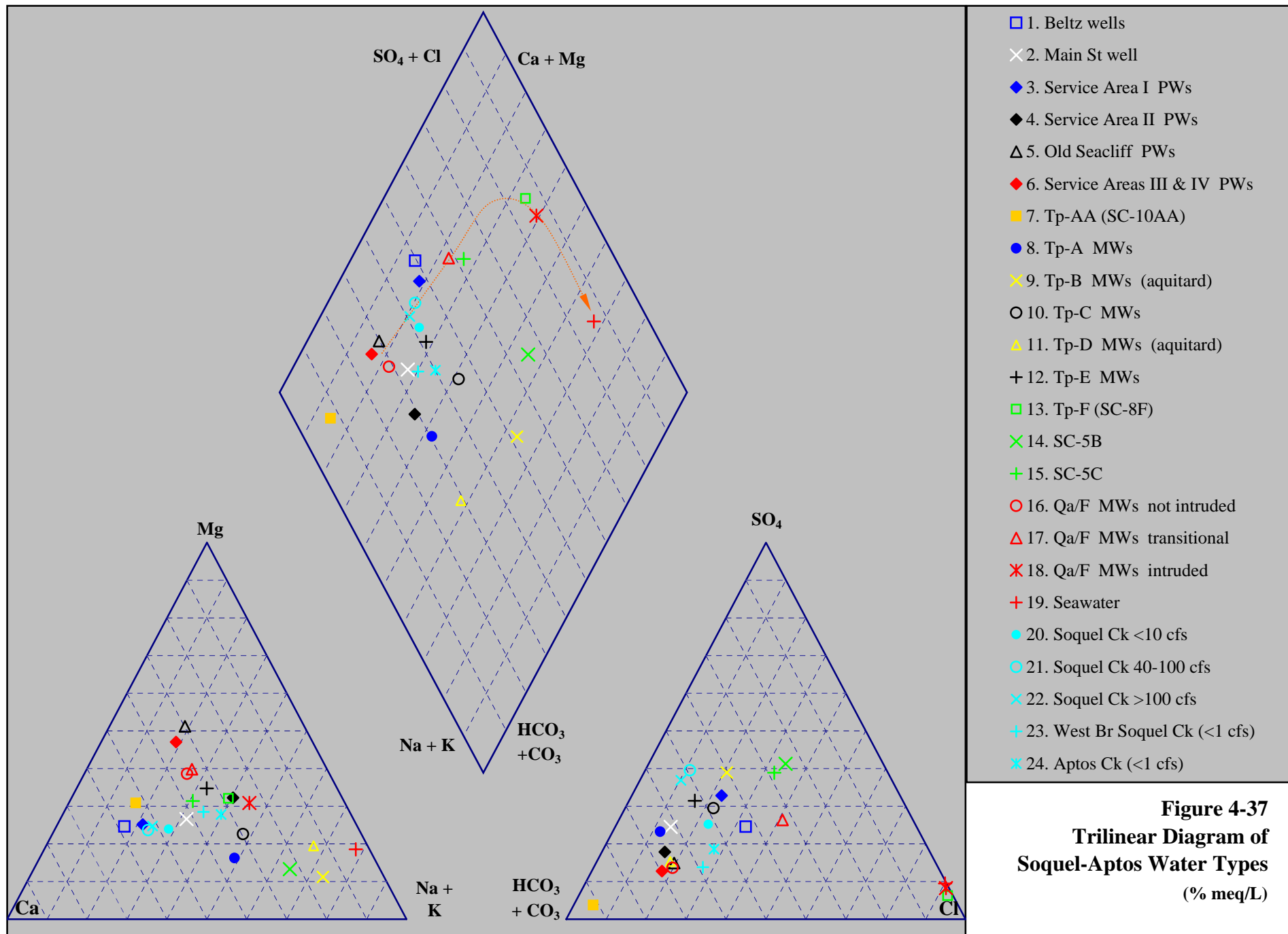


Figure 4-36
Profile of Production Zone Groundwater Levels



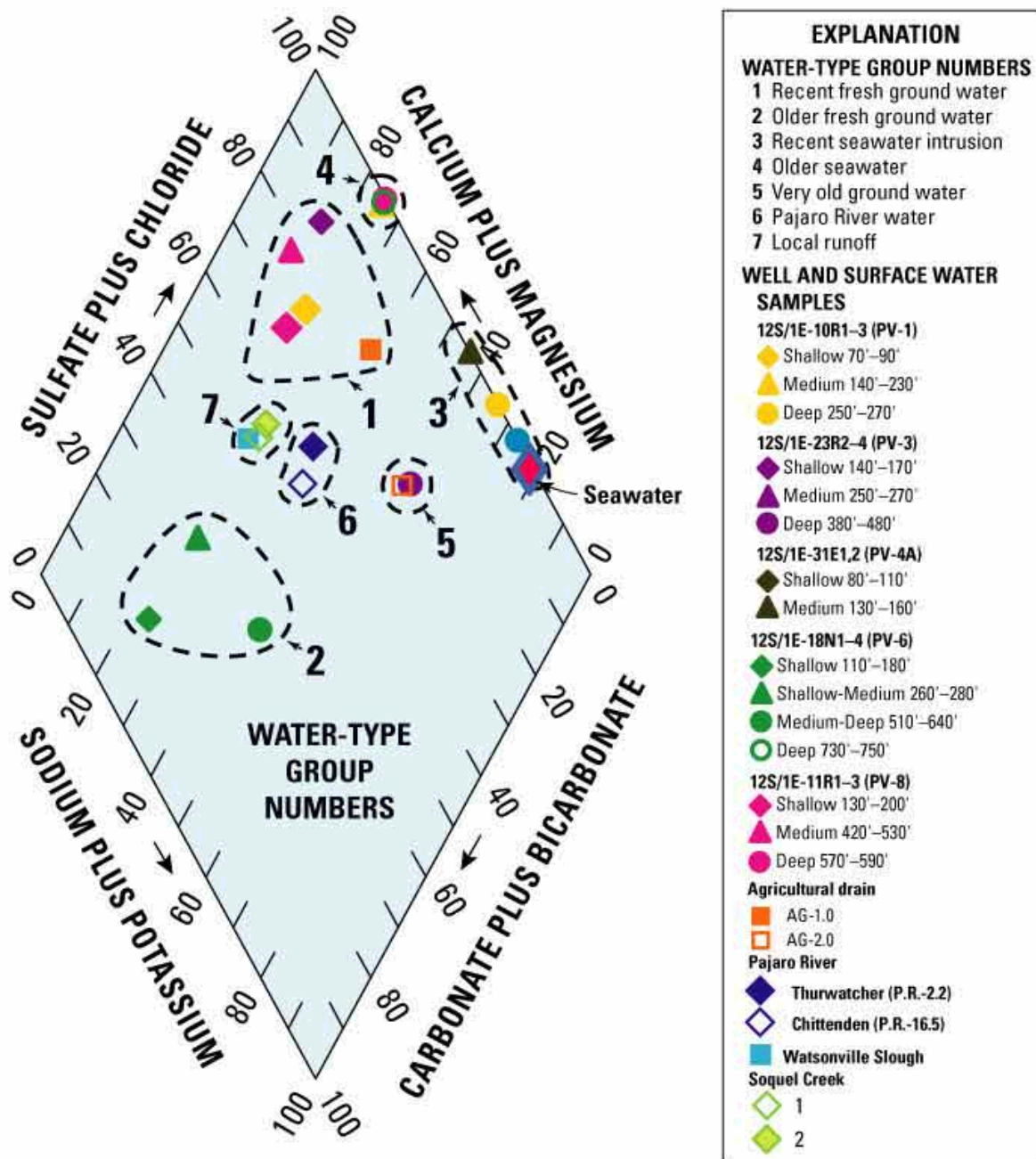


Figure 4-38

Trilinear Diagram of Pajaro Valley Groundwater and Surface Water
(% meq/L; from Hanson, 2003)