6. Santa Ana River, Reaches 2 & 3:

- Beneficial Uses: AGR, GWR, REC1, REC2, WARM, WILD, RARE
- Hydrologic Unit: 801.21 AND 801.21
- Total Water Body Size: 18 and 19 miles
- Size Impaired: Unknown at this time
- Extent of Impairment: Unknown at this time
- Data Analyses:

  Orange County Water District Data:

  - Reach 3 – 0/6 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg arsenic standard of 340 ug/L
  - Reach 3 – 0/6 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg copper standard of 29-36 ug/L
  - Reach 3 – 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) lead standard of 190 ug/L
  - Reach 3 – 0/6 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg nickel standard of 934-1100 ug/L
  - Reach 3 – 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr) silver standard of 14 ug/L
  - Reach 3 - 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" arsenic standard of 340 ug/L (1-hr avg)
  - Reach 3 - 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" copper standard of 16 ug/L (1-hr avg)
  - Reach 3 - 0/1 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" nickel standard of 559 ug/L (1-hr avg)
  - Reach 3 - 0/3 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" arsenic standard of 340 ug/L (1-hr avg)
  - Reach 3 - 0/3 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" copper standard of 28-33 ug/L (1-hr avg)

- Reach 3 - 0/3 exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" nickel standard of 900-1100 ug/L (1-hr avg)
- Reach 3 - 0/1 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" selenium standard of 20 ug/L (1-hr avg)
- Reach 2 - 0/18 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection" arsenic standard of 340 ug/L (1-hr avg)
- Reach 2 - 0/19 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection" copper standard of 13-35 ug/L (1-hr avg)
- Reach 2 - 0/1 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" cyanide standard of 22 ug/L (1-hr avg)
- Reach 2 - 0/3 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" lead standard of 140-154 ug/L (1-hr avg)
- Reach 2 - 0/17 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection" nickel standard of 161-274 ug/L (1-hr avg)
- Reach 2 - 0/1 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" selenium standard of 20 ug/L (1-hr avg)
- Reach 2 - 0/1 exceeded the "CTR for Inorganic Constituents Fresh Water Aquatic Life Protection (1/yr)" zinc standard of 226 ug/L (1-hr avg)
- Reach 3 – 0/4 (1/yr) exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg arsenic standard of 340 ug/L
- Reach 3 – 0/4 (1/yr) exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg copper standard of 29-36 ug/L
- Reach 3 – 0/1 (1/yr) exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg lead standard of 190 ug/L
- Reach 3 - 0/4 (1/yr) exceeded the CTR for Inorganic Constituents Fresh Water Aquatic Life Protection 1-hr avg nickel standard of 935-1100 ug/L

Regional Board Compliance Monitoring Data:

- Reach 3 - 1/18 data points exceed the Basin Plan TDS objective of 700 mg/L
- Reach 3 - 1/55 data points exceed the Basin Plan Total Nitrogen objective of 10 mg/L

- Potential Sources: Unknown at this time
- Recommendation:
  - Delist for TDS and Total Nitrogen
  - More monitoring for other constituents due to not enough data points available per parameter to reach a conclusion for impairment and insufficient data to back up results.
- TMDL Priority: None at this time
- TMDL Start Date: Not applicable at this time
- TMDL End Date: Not applicable at this time

SAR-BELOWDAM-01

ParamName Arsenic

SampDate	SampTime	Result_T	Units	StationName	ParamType
7/28/97	12:10	3.5	ug/L	SAR-BELOWDAM-01	INORGANIC
8/25/97	12:40	4.6	ug/L	SAR-BELOWDAM-01	INORGANIC
11/12/97	9:30	5.4	ug/L	SAR-BELOWDAM-01	INORGANIC
2/17/98	9:50	2.2	ug/L	SAR-BELOWDAM-01	INORGANIC
5/18/98	10:40	3.7	ug/L	SAR-BELOWDAM-01	INORGANIC
8/17/98	11:30	6.0	ug/L	SAR-BELOWDAM-01	INORGANIC
11/17/98	10:45	4.8	ug/L	SAR-BELOWDAM-01	INORGANIC
2/8/99	9:20	2.2	ug/L	SAR-BELOWDAM-01	INORGANIC
4/19/99	9:30	4.1	ug/L	SAR-BELOWDAM-01	INORGANIC
5/17/99	9:00	4.0	ug/L	SAR-BELOWDAM-01	INORGANIC
8/2/99	10:00	5.6	ug/L	SAR-BELOWDAM-01	INORGANIC
8/16/99	11:00	4.9	ug/L	SAR-BELOWDAM-01	INORGANIC
8/23/99	9:30	6.2	ug/L	SAR-BELOWDAM-01	INORGANIC
11/15/99	10:00	5.2	ug/L	SAR-BELOWDAM-01	INORGANIC
2/14/00	12:00	4.2	ug/L	SAR-BELOWDAM-01	INORGANIC
5/15/00	12:15	5.4	ug/L	SAR-BELOWDAM-01	INORGANIC
8/21/00	12:25	4.8	ug/L	SAR-BELOWDAM-01	INORGANIC
11/13/00	10:20	3.3	ug/L	SAR-BELOWDAM-01	INORGANIC

ParamName Copper

SampDate	SampTime	Result_T	Units	StationName	ParamType
7/28/97	12:10	2.8	ug/L	SAR-BELOWDAM-01	INORGANIC
8/13/97	9:15	5.6	ug/L	SAR-BELOWDAM-01	INORGANIC
8/25/97	12:40	4.8	ug/L	SAR-BELOWDAM-01	INORGANIC
11/12/97	9:30	6.3	ug/L	SAR-BELOWDAM-01	INORGANIC
2/17/98	9:50	8.3	ug/L	SAR-BELOWDAM-01	INORGANIC
5/18/98	10:40	11	ug/L	SAR-BELOWDAM-01	INORGANIC
8/17/98	11:30	5.4	ug/L	SAR-BELOWDAM-01	INORGANIC

11/17/98	10:45	5.1	ug/L	SAR-BELOWDAM-01	INORGANIC
2/8/99	9:20	5.7	ug/L	SAR-BELOWDAM-01	INORGANIC
4/19/99	9:30	6.9	ug/L	SAR-BELOWDAM-01	INORGANIC
5/17/99	9:00	5.7	ug/L	SAR-BELOWDAM-01	INORGANIC
8/2/99	10:00	6.0	ug/L	SAR-BELOWDAM-01	INORGANIC
8/16/99	11:00	10	ug/L	SAR-BELOWDAM-01	INORGANIC
8/23/99	9:30	9.7	ug/L	SAR-BELOWDAM-01	INORGANIC
11/15/99	10:00	6.8	ug/L	SAR-BELOWDAM-01	INORGANIC
2/14/00	12:00	11	ug/L	SAR-BELOWDAM-01	INORGANIC
5/15/00	12:15	10	ug/L	SAR-BELOWDAM-01	INORGANIC
8/21/00	12:25	4.1	ug/L	SAR-BELOWDAM-01	INORGANIC
11/13/00	10:20	11.9	ug/L	SAR-BELOWDAM-01	INORGANIC

ParamName Cyanide

SampDate	SampTime	Result_T	Units	StationName	ParamType
5/15/00	12:15	6.3	ug/L	SAR-BELOWDAM-01	INORGANIC

ParamName Lead

SampDate	SampTime	Result_T	Units	StationName	ParamType
11/12/97	9:30	1.5	ug/L	SAR-BELOWDAM-01	INORGANIC
4/19/99	9:30	1.0	ug/L	SAR-BELOWDAM-01	INORGANIC
11/13/00	10:20	1.3	ug/L	SAR-BELOWDAM-01	INORGANIC

ParamName Nickel

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/13/97	9:15	1.9	ug/L	SAR-BELOWDAM-01	INORGANIC
8/25/97	12:40	2.1	ug/L	SAR-BELOWDAM-01	INORGANIC
11/12/97	9:30	4.0	ug/L	SAR-BELOWDAM-01	INORGANIC
5/18/98	10:40	2.3	ug/L	SAR-BELOWDAM-01	INORGANIC
8/17/98	11:30	2.9	ug/L	SAR-BELOWDAM-01	INORGANIC
11/17/98	10:45	3.6	ug/L	SAR-BELOWDAM-01	INORGANIC
2/8/99	9:20	2.4	ug/L	SAR-BELOWDAM-01	INORGANIC
4/19/99	9:30	2.4	ug/L	SAR-BELOWDAM-01	INORGANIC
5/17/99	9:00	2.4	ug/L	SAR-BELOWDAM-01	INORGANIC

8/2/99	10:00	3.7	ug/L	SAR-BELOWDAM-01	INORGANIC
8/16/99	11:00	3.3	ug/L	SAR-BELOWDAM-01	INORGANIC
8/23/99	9:30	3.7	ug/L	SAR-BELOWDAM-01	INORGANIC
11/15/99	10:00	4.0	ug/L	SAR-BELOWDAM-01	INORGANIC
2/14/00	12:00	2.8	ug/L	SAR-BELOWDAM-01	INORGANIC
5/15/00	12:15	3.6	ug/L	SAR-BELOWDAM-01	INORGANIC
8/21/00	12:25	3.2	ug/L	SAR-BELOWDAM-01	INORGANIC
11/13/00	10:20	14.6	ug/L	SAR-BELOWDAM-01	INORGANIC

ParamName Selenium

SampDate	SampTime	Result_T	Units	StationName	ParamType
11/13/00	10:20	7.9	ug/L	SAR-BELOWDAM-01	INORGANIC

ParamName Zinc

SampDate	SampTime	Result_T	Units	StationName	ParamType
11/13/00	10:20	19.1	ug/L	SAR-BELOWDAM-01	INORGANIC

SAR-ETIWANDA-01

ParamName Arsenic

SampDate	SampTime	Result_Txt	Units	StationName	ParamType
8/25/97	16:15	3.3	ug/L	SAR-ETIWANDA-01	INORGANIC
8/17/98	11:55	5.3	ug/L	SAR-ETIWANDA-01	INORGANIC
8/23/99	12:20	8.4	ug/L	SAR-ETIWANDA-01	INORGANIC

ParamName Copper

SampDate	SampTime	Result_Txt	Units	StationName	ParamType
8/25/97	16:15	5.4	ug/L	SAR-ETIWANDA-01	INORGANIC
8/17/98	11:55	6.4	ug/L	SAR-ETIWANDA-01	INORGANIC
8/23/99	12:20	9.6	ug/L	SAR-ETIWANDA-01	INORGANIC

ParamName Nickel

SampDate	SampTime	Result_Txt	Units	StationName	ParamType
8/25/97	16:15	1.3	ug/L	SAR-ETIWANDA-01	INORGANIC
8/17/98	11:55	1.3	ug/L	SAR-ETIWANDA-01	INORGANIC
8/23/99	12:20	3.1	ug/L	SAR-ETIWANDA-01	INORGANIC

ParamName Selenium

SampDate	SampTime	Result_Txt	Units	StationName	ParamType
8/25/97	16:15	7.3	ug/L	SAR-ETIWANDA-01	INORGANIC

SAR-ETIWANDA-01

ParamName Arsenic

SampDate	SampTime	Result_Txt	Units	StationName	ParamType
8/25/97	16:15	3.3	ug/L	SAR-ETIWANDA-01	INORGANIC
8/17/98	11:55	5.3	ug/L	SAR-ETIWANDA-01	INORGANIC
8/23/99	12:20	8.4	ug/L	SAR-ETIWANDA-01	INORGANIC

ParamName Copper

SampDate	SampTime	Result_Txt	Units	StationName	ParamType
8/25/97	16:15	5.4	ug/L	SAR-ETIWANDA-01	INORGANIC
8/17/98	11:55	6.4	ug/L	SAR-ETIWANDA-01	INORGANIC
8/23/99	12:20	9.6	ug/L	SAR-ETIWANDA-01	INORGANIC

ParamName Nickel

SampDate	SampTime	Result_Txt	Units	StationName	ParamType
8/25/97	16:15	1.3	ug/L	SAR-ETIWANDA-01	INORGANIC
8/17/98	11:55	1.3	ug/L	SAR-ETIWANDA-01	INORGANIC
8/23/99	12:20	3.1	ug/L	SAR-ETIWANDA-01	INORGANIC

ParamName Selenium

SampDate	SampTime	Result_Txt	Units	StationName	ParamType
8/25/97	16:15	7.3	ug/L	SAR-ETIWANDA-01	INORGANIC

SAR-HAMNER-01

ParamName Arsenic

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/25/97	10:00	3.1	ug/L	SAR-HAMNER-01	INORGANIC

ParamName Copper

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/25/97	10:00	5.6	ug/L	SAR-HAMNER-01	INORGANIC

ParamName Nickel

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/25/97	10:00	3.0	ug/L	SAR-HAMNER-01	INORGANIC

SAR-MWDXING-01

ParamName Arsenic

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/25/97	12:10	6.8	ug/L	SAR-MWDXING-01	INORGANIC
8/17/98	11:10	4.6	ug/L	SAR-MWDXING-01	INORGANIC
8/23/99	11:30	7.2	ug/L	SAR-MWDXING-01	INORGANIC
8/22/00	12:15	4.6	ug/L	SAR-MWDXING-01	INORGANIC

ParamName Copper

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/25/97	12:10	3.2	ug/L	SAR-MWDXING-01	INORGANIC
8/17/98	11:10	7.3	ug/L	SAR-MWDXING-01	INORGANIC
8/23/99	11:30	9.5	ug/L	SAR-MWDXING-01	INORGANIC
8/22/00	12:15	9.8	ug/L	SAR-MWDXING-01	INORGANIC

ParamName Lead

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/22/00	12:15	1.6	ug/L	SAR-MWDXING-01	INORGANIC

ParamName Nickel

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/25/97	12:10	1.0	ug/L	SAR-MWDXING-01	INORGANIC
8/17/98	11:10	1.4	ug/L	SAR-MWDXING-01	INORGANIC
8/23/99	11:30	2.6	ug/L	SAR-MWDXING-01	INORGANIC
8/22/00	12:15	2.1	ug/L	SAR-MWDXING-01	INORGANIC

SAR-RIVERRD-01

ParamName Arsenic

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/13/97	10:40	4.1	ug/L	SAR-RIVERRD-01	INORGANIC
8/25/97	14:55	7.6	ug/L	SAR-RIVERRD-01	INORGANIC
8/4/98	11:20	5.0	ug/L	SAR-RIVERRD-01	INORGANIC
8/17/98	14:30	5.3	ug/L	SAR-RIVERRD-01	INORGANIC
8/23/99	11:30	8.2	ug/L	SAR-RIVERRD-01	INORGANIC
8/22/00	14:20	5.4	ug/L	SAR-RIVERRD-01	INORGANIC

ParamName Copper

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/13/97	10:40	7.0	ug/L	SAR-RIVERRD-01	INORGANIC
8/25/97	14:55	6.0	ug/L	SAR-RIVERRD-01	INORGANIC
8/4/98	11:20	6.4	ug/L	SAR-RIVERRD-01	INORGANIC
8/17/98	14:30	4.5	ug/L	SAR-RIVERRD-01	INORGANIC
8/23/99	11:30	8.2	ug/L	SAR-RIVERRD-01	INORGANIC
8/22/00	14:20	6.5	ug/L	SAR-RIVERRD-01	INORGANIC

ParamName Lead

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/22/00	14:20	1.3	ug/L	SAR-RIVERRD-01	INORGANIC

ParamName Nickel

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/13/97	10:40	2.6	ug/L	SAR-RIVERRD-01	INORGANIC
8/25/97	14:55	3.4	ug/L	SAR-RIVERRD-01	INORGANIC
8/4/98	11:20	2.2	ug/L	SAR-RIVERRD-01	INORGANIC
8/17/98	14:30	2.3	ug/L	SAR-RIVERRD-01	INORGANIC
8/23/99	11:30	6.7	ug/L	SAR-RIVERRD-01	INORGANIC
8/22/00	14:20	3.2	ug/L	SAR-RIVERRD-01	INORGANIC

ParamName Silver

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/17/98	14:30	12	ug/L	SAR-RIVERRD-01	INORGANIC

qry SAR-BELOWDAM-01

StationName SAR-BELOWDAM-01

ParamName	SampDate	SampTime	Result_Tx	ParamType	Units
Arsenic	7/28/97	12:10	3.5	INORGANIC	ug/L
Arsenic	8/25/97	12:40	4.6	INORGANIC	ug/L
Arsenic	11/12/97	9:30	5.4	INORGANIC	ug/L
Arsenic	2/17/98	9:50	2.2	INORGANIC	ug/L
Arsenic	5/18/98	10:40	3.7	INORGANIC	ug/L
Arsenic	8/17/98	11:30	6.0	INORGANIC	ug/L
Arsenic	11/17/98	10:45	4.8	INORGANIC	ug/L
Arsenic	2/8/99	9:20	2.2	INORGANIC	ug/L
Arsenic	4/19/99	9:30	4.1	INORGANIC	ug/L
Arsenic	5/17/99	9:00	4.0	INORGANIC	ug/L
Arsenic	8/2/99	10:00	5.6	INORGANIC	ug/L
Arsenic	8/16/99	11:00	4.9	INORGANIC	ug/L
Arsenic	8/23/99	9:30	6.2	INORGANIC	ug/L
Arsenic	11/15/99	10:00	5.2	INORGANIC	ug/L
Arsenic	2/14/00	12:00	4.2	INORGANIC	ug/L
Arsenic	5/15/00	12:15	5.4	INORGANIC	ug/L
Arsenic	8/21/00	12:25	4.8	INORGANIC	ug/L
Arsenic	11/13/00	10:20	3.3	INORGANIC	ug/L
Copper	7/28/97	12:10	2.8	INORGANIC	ug/L
Copper	8/13/97	9:15	5.6	INORGANIC	ug/L
Copper	8/25/97	12:40	4.8	INORGANIC	ug/L
Copper	11/12/97	9:30	6.3	INORGANIC	ug/L
Copper	2/17/98	9:50	8.3	INORGANIC	ug/L
Copper	5/18/98	10:40	11	INORGANIC	ug/L
Copper	8/17/98	11:30	5.4	INORGANIC	ug/L
Copper	11/17/98	10:45	5.1	INORGANIC	ug/L
Copper	2/8/99	9:20	5.7	INORGANIC	ug/L

Copper	4/19/99	9:30 6.9	INORGANIC	ug/L
Copper	5/17/99	9:00 5.7	INORGANIC	ug/L
Copper	8/2/99	10:00 6.0	INORGANIC	ug/L
Copper	8/16/99	11:00 10	INORGANIC	ug/L
Copper	8/23/99	9:30 9.7	INORGANIC	ug/L
Copper	11/15/99	10:00 6.8	INORGANIC	ug/L
Copper	2/14/00	12:00 11	INORGANIC	ug/L
Copper	5/15/00	12:15 10	INORGANIC	ug/L
Copper	8/21/00	12:25 4.1	INORGANIC	ug/L
Copper	11/13/00	10:20 11.9	INORGANIC	ug/L
Cyanide	5/15/00	12:15 6.3	INORGANIC	ug/L
Lead	11/12/97	9:30 1.5	INORGANIC	ug/L
Lead	4/19/99	9:30 1.0	INORGANIC	ug/L
Lead	11/13/00	10:20 1.3	INORGANIC	ug/L
Nickel	8/13/97	9:15 1.9	INORGANIC	ug/L
Nickel	8/25/97	12:40 2.1	INORGANIC	ug/L
Nickel	11/12/97	9:30 4.0	INORGANIC	ug/L
Nickel	5/18/98	10:40 2.3	INORGANIC	ug/L
Nickel	8/17/98	11:30 2.9	INORGANIC	ug/L
Nickel	11/17/98	10:45 3.6	INORGANIC	ug/L
Nickel	2/8/99	9:20 2.4	INORGANIC	ug/L
Nickel	4/19/99	9:30 2.4	INORGANIC	ug/L
Nickel	5/17/99	9:00 2.4	INORGANIC	ug/L
Nickel	8/2/99	10:00 3.7	INORGANIC	ug/L
Nickel	8/16/99	11:00 3.3	INORGANIC	ug/L
Nickel	8/23/99	9:30 3.7	INORGANIC	ug/L
Nickel	11/15/99	10:00 4.0	INORGANIC	ug/L
Nickel	2/14/00	12:00 2.8	INORGANIC	ug/L
Nickel	5/15/00	12:15 3.6	INORGANIC	ug/L
Nickel	8/21/00	12:25 3.2	INORGANIC	ug/L
Nickel	11/13/00	10:20 14.6	INORGANIC	ug/L

Selenium	11/13/00	10:20	7.9	INORGANIC	ug/L
Zinc	11/13/00	10:20	19.1	INORGANIC	ug/L

SAR-WATERMAN-01

ParamName Chromium

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/23/99	9:45	5.8	ug/L	SAR-WATERMAN-01	INORGANIC
8/22/00	9:45	6.2	ug/L	SAR-WATERMAN-01	INORGANIC

ParamName Copper

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/17/98	9:05	3.0	ug/L	SAR-WATERMAN-01	INORGANIC
8/23/99	9:45	6.2	ug/L	SAR-WATERMAN-01	INORGANIC
8/22/00	9:45	9.1	ug/L	SAR-WATERMAN-01	INORGANIC

ParamName Lead

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/22/00	9:45	1.9	ug/L	SAR-WATERMAN-01	INORGANIC

ParamName Nickel

SampDate	SampTime	Result_T	Units	StationName	ParamType
8/22/00	9:45	2.0	ug/L	SAR-WATERMAN-01	INORGANIC

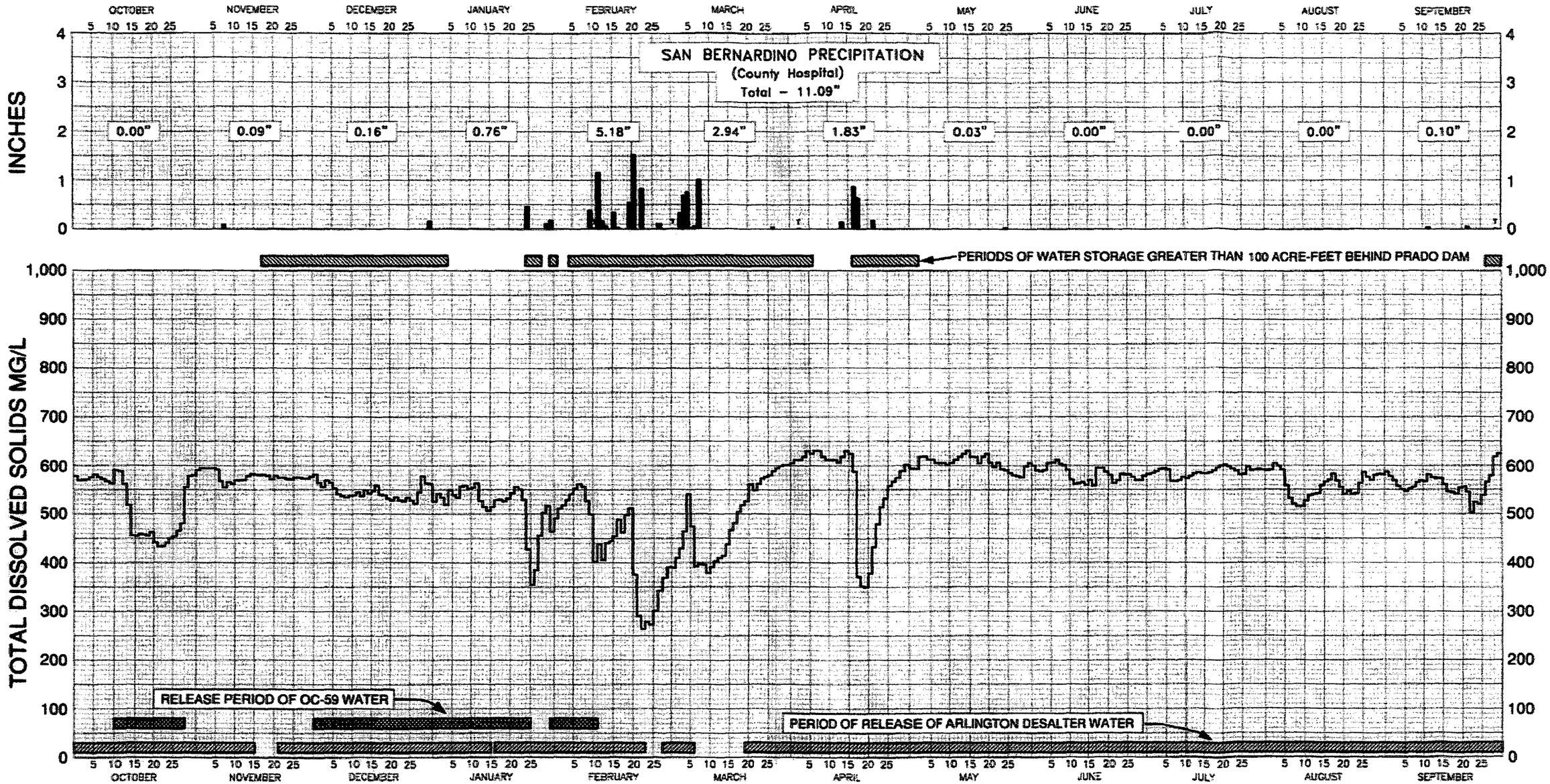
ORGANICS

StationName SAR-BELOWDAM-01

SampDate	SampTime	ParamName	Result_T	ParamType	ParamGrp
2/17/98	9:50	Bromodichloromethane	0.1	ORGANIC	551
3/16/98	9:20	Toluene	1.4	ORGANIC	502
3/26/98	13:15	Toluene	5.1	ORGANIC	502

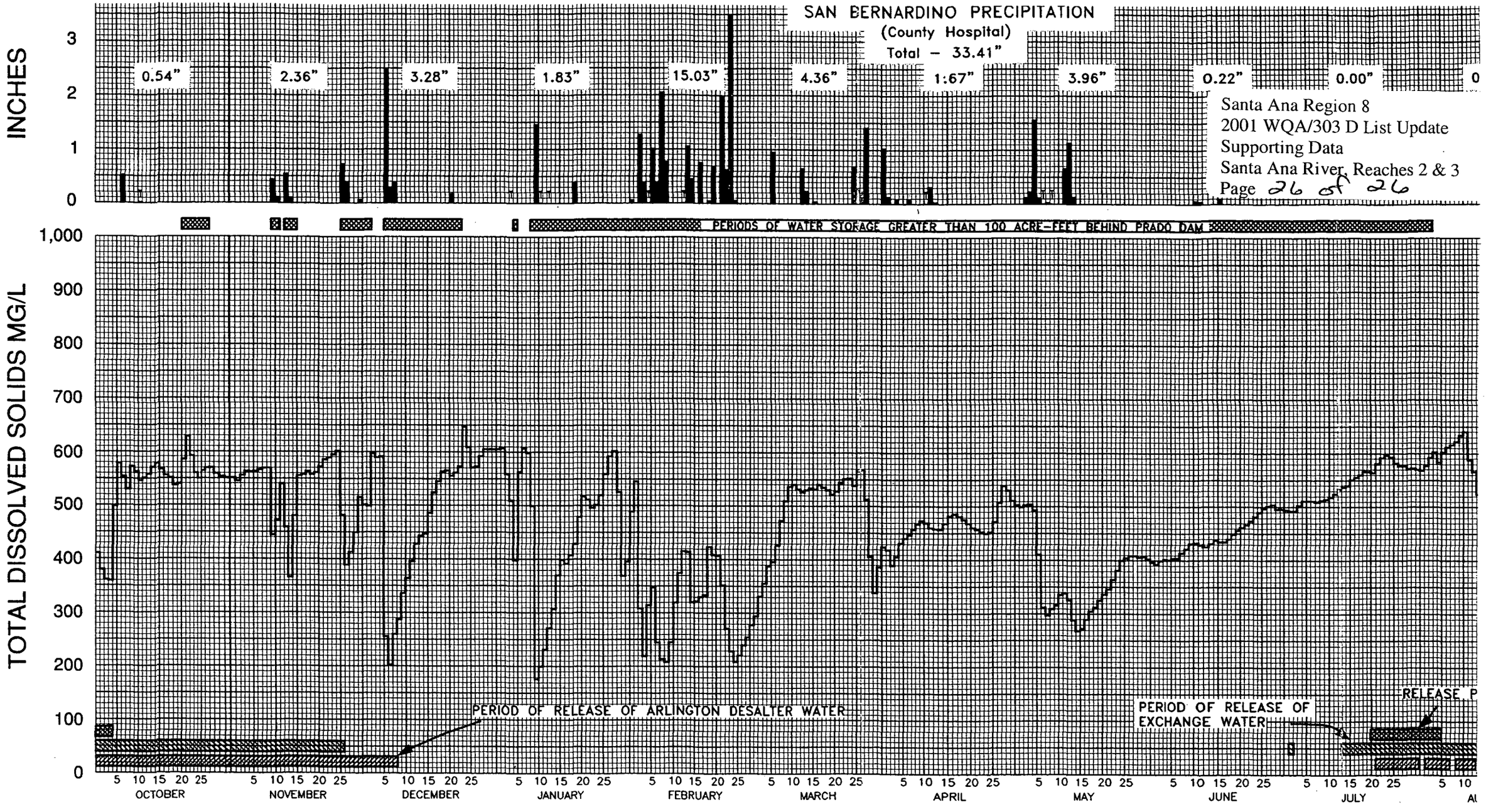
StationName SAR-RIVERRD-01

SampDate	SampTime	ParamName	Result_T	ParamType	ParamGrp
2/17/98	14:50	Bromodichloromethane	0.6	ORGANIC	502



DISSOLVED SOLIDS IN SANTA ANA RIVER BELOW PRADO DAM
WATER YEAR 1999-00

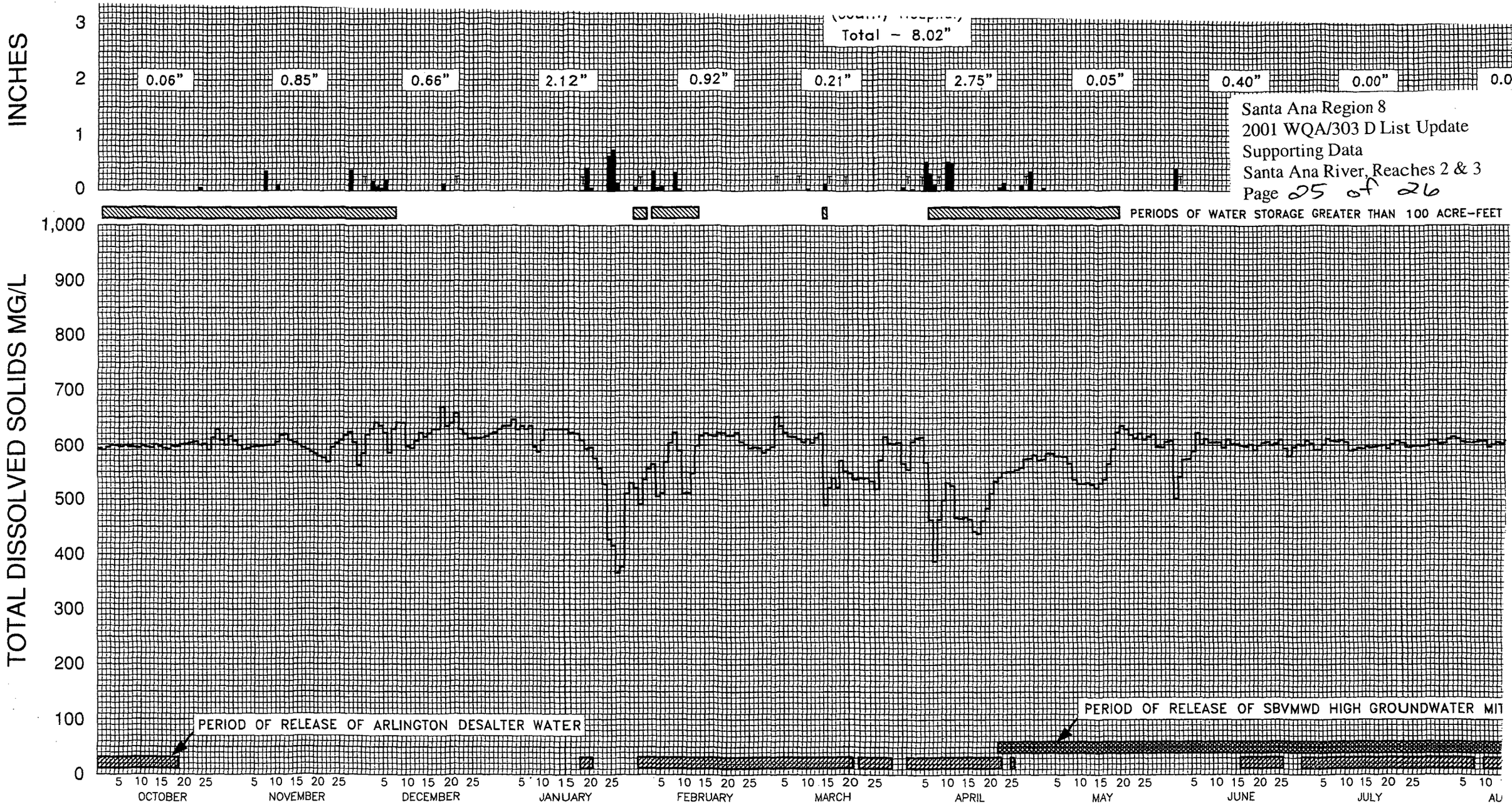
Plate 6



SUBJECT: TWENTY-EIGHTH ANNUAL REPORT OF THE SANTA ANA RIVER WATERMASTER, 1997-98

DISSOLVED SOLIDS IN SANTA ANA RIVER BELOW PRADO DAM

WATER YEAR 1997-98



TWENTY-NINTH ANNUAL REPORT OF THE
SANTA ANA RIVER WATERMASTER, 1998-99

Transmitted herewith is the "twenty-ninth Annual Report of the Santa Ana River Watermaster, 1998-99", dated April 30, 2000.

DISSOLVED SOLIDS IN SANTA ANA RIVER BELOW PRADO DAM

WATER YEAR 1998-99

SAR hardness

StationName SAR-BELOWDAM-01

ParamName	SampDate	SampTime	Result_Txt
Total Hardness (as CaCO3)	7/14/97	9:10	186
Total Hardness (as CaCO3)	7/28/97	12:10	192
Total Hardness (as CaCO3)	8/5/97	11:35	162
Total Hardness (as CaCO3)	8/13/97	9:15	162
Total Hardness (as CaCO3)	8/19/97	9:15	171
Total Hardness (as CaCO3)	8/25/97	12:40	161
Total Hardness (as CaCO3)	9/17/97	11:00	166
Total Hardness (as CaCO3)	9/23/97	12:50	166
Total Hardness (as CaCO3)	10/20/97	10:00	234
Total Hardness (as CaCO3)	11/12/97	9:30	224
Total Hardness (as CaCO3)	12/15/97	9:30	212
Total Hardness (as CaCO3)	1/19/98	9:00	186
Total Hardness (as CaCO3)	2/17/98	9:50	146
Total Hardness (as CaCO3)	3/16/98	9:20	253
Total Hardness (as CaCO3)	3/30/98	15:10	148
Total Hardness (as CaCO3)	4/2/98	9:40	192
Total Hardness (as CaCO3)	4/3/98	9:00	178
Total Hardness (as CaCO3)	4/20/98	10:30	236
Total Hardness (as CaCO3)	5/18/98	10:40	162
Total Hardness (as CaCO3)	6/15/98	10:40	202
Total Hardness (as CaCO3)	7/20/98	10:30	261
Total Hardness (as CaCO3)	8/4/98	10:10	298
Total Hardness (as CaCO3)	8/11/98	10:00	272
Total Hardness (as CaCO3)	8/17/98	11:30	245
Total Hardness (as CaCO3)	8/27/98	10:00	255
Total Hardness (as CaCO3)	9/3/98	7:35	239
Total Hardness (as CaCO3)	9/10/98	7:35	244

Total Hardness (as CaCO3)	9/14/98	10:00	253
Total Hardness (as CaCO3)	9/22/98	7:30	280
Total Hardness (as CaCO3)	10/20/98	11:15	290
Total Hardness (as CaCO3)	11/17/98	10:45	254
Total Hardness (as CaCO3)	12/14/98	9:40	273
Total Hardness (as CaCO3)	1/18/99	9:50	272
Total Hardness (as CaCO3)	2/8/99	9:20	245
Total Hardness (as CaCO3)	3/15/99	9:45	257
Total Hardness (as CaCO3)	4/19/99	9:30	204
Total Hardness (as CaCO3)	5/17/99	9:00	274
Total Hardness (as CaCO3)	6/21/99	9:25	267
Total Hardness (as CaCO3)	7/19/99	9:05	257
Total Hardness (as CaCO3)	8/2/99	10:00	267
Total Hardness (as CaCO3)	8/9/99	9:15	232
Total Hardness (as CaCO3)	8/16/99	11:00	247
Total Hardness (as CaCO3)	8/23/99	9:30	256
Total Hardness (as CaCO3)	8/30/99	9:45	253
Total Hardness (as CaCO3)	9/20/99	12:30	243
Total Hardness (as CaCO3)	10/18/99	12:15	197
Total Hardness (as CaCO3)	11/15/99	10:00	265
Total Hardness (as CaCO3)	12/13/99	14:00	254
Total Hardness (as CaCO3)	1/19/00	10:15	220
Total Hardness (as CaCO3)	2/14/00	12:00	220
Total Hardness (as CaCO3)	3/20/00	10:50	223
Total Hardness (as CaCO3)	4/17/00	11:45	281
Total Hardness (as CaCO3)	5/15/00	12:15	254
Total Hardness (as CaCO3)	6/19/00	12:00	245
Total Hardness (as CaCO3)	7/24/00	13:30	249
Total Hardness (as CaCO3)	8/1/00	9:10	243
Total Hardness (as CaCO3)	8/8/00	8:20	237
Total Hardness (as CaCO3)	8/15/00	9:35	239

Total Hardness (as CaCO3)	8/21/00	12:25	243
Total Hardness (as CaCO3)	8/29/00	10:45	250
Total Hardness (as CaCO3)	9/25/00	11:15	256
Total Hardness (as CaCO3)	10/23/00	12:30	222
Total Hardness (as CaCO3)	11/13/00	10:20	216
Total Hardness (as CaCO3)	12/18/00	12:40	252
Total Hardness (as CaCO3)	1/22/01	12:00	177

StationName SAR-ETIWANDA-01

ParamName	SampDate	SampTime	Result_Txt
Total Hardness (as CaCO3)	8/25/97	16:15	248
Total Hardness (as CaCO3)	8/17/98	11:55	217
Total Hardness (as CaCO3)	8/23/99	12:20	258

StationName SAR-HAMNER-01

ParamName	SampDate	SampTime	Result_Txt
Total Hardness (as CaCO3)	8/25/97	10:00	123

StationName SAR-LAKEVIEW-01

ParamName	SampDate	SampTime	Result_Txt
Total Hardness (as CaCO3)	7/20/98	9:00	269
Total Hardness (as CaCO3)	7/21/98	10:20	281
Total Hardness (as CaCO3)	7/22/98	8:55	273
Total Hardness (as CaCO3)	7/23/98	7:30	250
Total Hardness (as CaCO3)	7/24/98	10:00	295
Total Hardness (as CaCO3)	7/27/98	15:45	279
Total Hardness (as CaCO3)	7/28/98	7:20	298
Total Hardness (as CaCO3)	7/29/98	10:00	316
Total Hardness (as CaCO3)	7/30/98	8:55	264
Total Hardness (as CaCO3)	7/31/98	7:15	262
Total Hardness (as CaCO3)	8/4/98	8:40	303

StationName SAR-MWDXING-01

ParamName	SampDate	SampTime	Result_Txt
Total Hardness (as CaCO3)	8/25/97	12:10	167
Total Hardness (as CaCO3)	4/2/98	13:15	174
Total Hardness (as CaCO3)	4/3/98	12:10	332
Total Hardness (as CaCO3)	8/17/98	11:10	250
Total Hardness (as CaCO3)	8/23/99	11:30	323
Total Hardness (as CaCO3)	8/22/00	12:15	306

StationName SAR-RIVERRD-01

ParamName	SampDate	SampTime	Result_Txt
Total Hardness (as CaCO3)	7/14/97	10:20	260
Total Hardness (as CaCO3)	8/5/97	10:00	261
Total Hardness (as CaCO3)	8/13/97	10:40	262
Total Hardness (as CaCO3)	8/19/97	10:55	267
Total Hardness (as CaCO3)	8/25/97	14:55	256
Total Hardness (as CaCO3)	9/17/97	11:40	253
Total Hardness (as CaCO3)	9/23/97	11:30	264
Total Hardness (as CaCO3)	10/3/97	12:15	244
Total Hardness (as CaCO3)	10/20/97	11:20	251
Total Hardness (as CaCO3)	11/12/97	11:25	229
Total Hardness (as CaCO3)	12/15/97	10:40	273
Total Hardness (as CaCO3)	1/19/98	11:05	284
Total Hardness (as CaCO3)	2/17/98	14:50	99.4
Total Hardness (as CaCO3)	3/16/98	11:00	274
Total Hardness (as CaCO3)	4/2/98	11:30	167
Total Hardness (as CaCO3)	4/3/98	10:45	396
Total Hardness (as CaCO3)	4/20/98	12:15	237
Total Hardness (as CaCO3)	5/18/98	12:35	162
Total Hardness (as CaCO3)	6/15/98	12:15	236
Total Hardness (as CaCO3)	7/20/98	12:40	269
Total Hardness (as CaCO3)	8/4/98	11:20	294

Total Hardness (as CaCO3)	8/11/98	12:15	248
Total Hardness (as CaCO3)	8/17/98	14:30	226
Total Hardness (as CaCO3)	8/27/98	11:45	262
Total Hardness (as CaCO3)	9/14/98	12:10	280
Total Hardness (as CaCO3)	10/20/98	13:00	299
Total Hardness (as CaCO3)	11/17/98	14:35	273
Total Hardness (as CaCO3)	12/14/98	13:15	297
Total Hardness (as CaCO3)	1/18/99	12:35	296
Total Hardness (as CaCO3)	2/8/99	13:00	274
Total Hardness (as CaCO3)	3/15/99	12:35	263
Total Hardness (as CaCO3)	4/19/99	11:40	269
Total Hardness (as CaCO3)	5/17/99	12:15	288
Total Hardness (as CaCO3)	6/21/99	11:30	284
Total Hardness (as CaCO3)	7/19/99	11:00	256
Total Hardness (as CaCO3)	8/2/99	11:50	294
Total Hardness (as CaCO3)	8/9/99	10:25	266
Total Hardness (as CaCO3)	8/16/99	11:35	276
Total Hardness (as CaCO3)	8/23/99	11:30	279
Total Hardness (as CaCO3)	8/30/99	11:00	301
Total Hardness (as CaCO3)	9/20/99	10:45	266
Total Hardness (as CaCO3)	10/18/99	11:00	288
Total Hardness (as CaCO3)	11/16/99	11:30	297
Total Hardness (as CaCO3)	12/13/99	11:05	269
Total Hardness (as CaCO3)	1/17/00	11:40	275
Total Hardness (as CaCO3)	2/22/00	9:40	151
Total Hardness (as CaCO3)	3/20/00	10:20	281
Total Hardness (as CaCO3)	4/17/00	9:55	287
Total Hardness (as CaCO3)	5/16/00	10:20	304
Total Hardness (as CaCO3)	6/20/00	11:15	309
Total Hardness (as CaCO3)	7/25/00	12:55	268
Total Hardness (as CaCO3)	8/1/00	11:00	276

Total Hardness (as CaCO3)	8/8/00	9:40	266
Total Hardness (as CaCO3)	8/15/00	10:50	308
Total Hardness (as CaCO3)	8/22/00	14:20	278
Total Hardness (as CaCO3)	8/29/00	13:00	277
Total Hardness (as CaCO3)	9/26/00	14:05	260
Total Hardness (as CaCO3)	10/24/00	11:25	270
Total Hardness (as CaCO3)	11/14/00	11:00	267
Total Hardness (as CaCO3)	12/18/00	11:20	262
Total Hardness (as CaCO3)	1/16/01	11:00	215