APPENDIX A
DATA COLLECTED DURING 2004 RIO HONDO ASSESSMENT

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Rio Hondo nr Taos TMDL (2004)
NUTRIENT DATA

Wednesday, November 24, 2004

Rio Hondo (South Fork Rio Hondo to Lake Fork Creek)

RIO HONDO 2.4 MILES BLW STP

2/11/2004 12:40:00 PM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.63	0.22	0.85	0.03	28.33	8.21	149	0.54	11.6	115.6	0
Less than:	No	No		Yes							
Qualifier codes:											

2/26/2004 12:30:00 PM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.87	0.1	0.97	0.03	32.33	8.17	193	1.78	10.08	100.7	0.8
Less than:	No	Yes		Yes							
Qualifier codes:											

3/10/2004 1:00:00 PM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.58	0.242	0.822	0.03	27.4	8.33	189	3.07	10.39	101.8	0
Less than:	No	No		Yes							
Qualifier codes:											

DO charge = 32.9

3/24/2004 4:00:00 PM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.48	0.156	0.636	0.03	21.2						
Less than:	No	No		Yes							
Qualifier codes:											

No field paramters measured as sondes were deployed for unattended sampling at other sites

4/6/2004 12:15:00 PM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.38	0.131	0.511	0.03	17.03	8.12	170	3.69	9.85	103.6	0.6
Less than:	No	No		Yes							
Qualifier codes:											

DO charge = 31.8

4/21/2004 1:20:00 PM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.29	0.117	0.407	0.03	13.56	8.41	155	5.58	9.03	99.2	3.6
Less than:	No	No		Yes							
Qualifier codes:											

DO charge = 40.0

5/19/2004 11:30:00 AM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.35	0.182	0.532	0.03	17.73	8.38	135	6.41	9.02	101	11.7
Less than:	No	No		Yes							
Qualifier codes:											

DO charge = 38.0

6/15/2004 11:20:00 AM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.36	0.1	0.46	0.03	15.33	7.71	144	8.03	8.71	98.2	0
Less than:	No	Yes		Yes							
Qualifier codes:											

DO ch = 49.2

7/21/2004 10:35:00 AM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.37	0.233	0.603	0.03	20.1	7.77	162	10.07	8.46	103.9	1.3
Less than:	No	No		Yes							
Qualifier codes:											

DO charge = 43.1

8/24/2004 12:30:00 PM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.28	0.1	0.38	0.03	12.66	7.9	166	7.81	9.91	117.7	
Less than:	No	Yes		Yes							
Qualifier codes:											

DO charge = 40.0

RIO HONDO 300 YDS BLW STP

2/11/2004 11:55:00 AM	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
	0.64	0.144	0.784	0.03	26.13	8.35	146.9	0.77	11.58	116.5	0
Less than:	No	No		Yes							
Qualifier codes:											

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
2/26/2004 1:40:00 PM	1	0.157	1.157	0.03	38.56	8.15	189	2.42	10.47	103.2	1.5
Less than:	No	No		Yes							
Qualifier codes:											

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
3/10/2004 2:15:00 PM	0.63	0.685	1.315	0.0493	26.67	8.38	196	3.8	9.67	106.5	46.3
Less than:	No	No		No							
Qualifier codes:											

DO charge = 33.9
2360023 = acidified
2360024 = unacidified

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
3/24/2004 3:30:00 PM	0.68	0.188	0.868	0.03	28.93	8.14	185	5.67	9.77	109.4	10.3
Less than:	No	No		Yes							
Qualifier codes:											

DO charge = 35.9

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
4/6/2004 1:15:00 PM	0.53	0.102	0.632	0.03	21.06	8.14	185	4.18	9.65	107.3	2.7
Less than:	No	No		Yes							
Qualifier codes:											

DO charge = 32.9

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
4/21/2004 2:40:00 PM	0.34	0.1	0.44	0.03	14.66	8.34	171	5.13	9.44	107.6	5.8
Less than:	No	Yes		Yes							
Qualifier codes:											

DO charge = 40.0

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
6/15/2004 12:40:00 PM	0.39	0.1	0.49	0.03	16.33	7.71	136	6.9	8.85	104	0
Less than:	No	Yes		Yes							
Qualifier codes:											

DO ch = 48.2

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
7/21/2004 12:00:00 PM	0.54	0.1	0.64	0.03	21.33	8.03	159	8.51	8.56	104.4	2.9
Less than:	No	Yes		Yes							
Qualifier codes:											

DO charge = 42.0

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
8/24/2004 12:00:00 PM	0.33	0.1	0.43	0.03	14.33	7.85	161	6.75	10.06	115.6	
Less than:	No	Yes		Yes							
Qualifier codes:											

DO charge = 38.0

RIO HONDO 50 FEET ABOVE WWTP

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
2/11/2004 10:45:00 AM	0.38	0.294	0.674	0.03	22.46	8.22	134.1	0.49	11.32	111.4	0
Less than:	No	No		Yes							
Qualifier codes:											

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
2/26/2004 1:15:00 PM	0.37	0.1	0.47	0.03	15.66	8.12	166	2.13	9.94	99.9	3
Less than:	No	Yes		Yes							
Qualifier codes:											

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
3/10/2004 1:40:00 PM	0.34	0.172	0.512	0.0858	5.967	8.37	174	3.7	9.65	105.3	41.7
Less than:	No	No		No							
Qualifier codes:											

DO charge = 32.9
2360015 = acidified
2360016 = unacidified

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
3/24/2004 2:55:00 PM	0.33	0.1	0.43	0.03	14.33	8.09	170	5.56	9.39	104.6	5.9
Less than:	No	Yes		Yes							
Qualifier codes:											

DO charge = 35.9

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
4/6/2004 12:45:00 PM	0.32	0.113	0.433	0.03	14.43	8.24	172	3.84	9.72	107.1	3
Less than:	No	No		Yes							
Qualifier codes:											

= 31.8 DO charge

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
4/21/2004 2:10:00 PM	0.33	0.115	0.445	0.03	14.83	8.49	165	4.9	9.24	104.7	7.2
Less than:	No	No		Yes							
Qualifier codes:											

DO charge = 40.0

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
6/15/2004 12:20:00 PM	0.37	0.1	0.47	0.03	15.66	7.65	135	6.78	8.93	104.2	0
Less than:	No	Yes		Yes							
Qualifier codes:											

DO ch = 50.2

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
7/21/2004 11:35:00 AM	0.1	0.1	0.2	0.03	6.666	7.98	152	8.26	7.88	99.5	3.2
Less than:	Yes	Yes		Yes							
Qualifier codes:											

DO charge = 43.1

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
8/24/2004 11:45:00 AM	0.31	0.1	0.41	0.03	13.66	7.81	157	6.47	9.85	112.8	
Less than:	No	Yes		Yes							
Qualifier codes:											

DO charge = 39.0

TWINING WWTP EFFLUENT @ TAOS SKI VALLEY

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
2/11/2004 11:30:00 AM	28	1.14	29.14	0.0572	509.4	7.93	788	10.79	6.32	83.7	0
Less than:	No	No		No							
Qualifier codes:											

sample and measurments taken from effluent inside the plant as the outside pipe was iced over

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
2/26/2004 2:00:00 PM	22	4.76	26.76	0.11	243.2	7.61	835	11.23	5.11	65.4	0
Less than:	No	No		No							
Qualifier codes:											

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
3/10/2004 2:00:00 PM	13	27	40	0.252	158.7	7.54	928	11.47	3.16	41.4	0
Less than:	No	No		No							
Qualifier codes:											

DO charge = 32.9

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
3/24/2004 2:40:00 PM	20	7.12	27.12	0.126	215.2	7.41	823	14.45	2.45	30.3	0.01
Less than:	No	No		No							
Qualifier codes:											

DO ch = 31.8

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
4/6/2004 1:00:00 PM	17	1.1	18.1	0.0592	305.7	7.69	812	10.7	3.73	48.7	0
Less than:	No	No		No							
Qualifier codes:											

DO charge = 29.8

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
4/21/2004 3:05:00 PM	19	1.34	20.34	0.0576	353.1	7.78	635	8.94	5.71	71.7	2.5
Less than:	No	No		No							
Qualifier codes:											

DO charge = 40.0

	bioavailable	Other N:	total N:	total P:	N/P:	pH:	EC:	Temp:	DO	DO	Turb:
8/24/2004 12:10:00 PM	27	0.343	27.343	0.958	28.54						
Less than:	No	No		No							
Qualifier codes:											

No sonde readings taken.

"Bioavailable" nitrogen is nitrate/nitrite. "Other" nitrogen is TKN. "Total" nitrogen is the sum. "N/P" is total nitrogen divided by total

Data Qualifier Codes:

Bench chemistry analyses:

A - Insufficient sample to analyze or verify results.
B - Sample holding time exceeded at laboratory.
C - Sample submitted past holding time.
D - Inconsistent results, data unusable, suggest
E - Matrix interference suspected.
F - Ion balance criteria exceeded.
G - Result equals 50% or more of EPA MCL.
H - Result equals or exceeds EPA MCL for this analyte.
I - Spike recovery <80% or >120%.
J - Estimated quantity only.
K - Sample rejected.
L - Sample voided at laboratory.
M - Daily control value <80% or >120% of theoretical value.
N - External control value <80% or >120% of theoretical

Rio Hondo near Taos TMDL (2004)

SLD Ammonia Nitrogen data

Rio Hondo (South Fork Rio Hondo to Lake Fork Creek)

SITE DESCRIPTION	*Date/Time*	Analyte	Results
RIO HONDO 2.4 MILES BLW STP	2/11/2004 12:40	Ammonia	0.1 mg/L
RIO HONDO 2.4 MILES BLW STP	2/26/2004 12:30	Ammonia	0.1 mg/L
RIO HONDO 2.4 MILES BLW STP	3/10/2004 13:00	Ammonia	0.129 mg/L
RIO HONDO 2.4 MILES BLW STP	3/24/2004 16:00	Ammonia	0.1 mg/L
RIO HONDO 2.4 MILES BLW STP	4/6/2004 12:15	Ammonia	0.1 mg/L
RIO HONDO 2.4 MILES BLW STP	4/21/2004 13:20	Ammonia	0.1 mg/L
RIO HONDO 2.4 MILES BLW STP	5/19/2004 11:30	Ammonia	0.1 mg/L
RIO HONDO 2.4 MILES BLW STP	6/15/2004 11:20	Ammonia	0.1 mg/L
RIO HONDO 2.4 MILES BLW STP	7/21/2004 10:35	Ammonia	0.1 mg/L
RIO HONDO 2.4 MILES BLW STP	8/24/2004 12:30	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	2/11/2004 11:55	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	2/26/2004 13:40	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	3/10/2004 14:15	Ammonia	0.449 mg/L
RIO HONDO 300 YDS BLW STP	3/24/2004 15:30	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	4/6/2004 13:15	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	4/21/2004 14:40	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	5/19/2004 13:10	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	6/15/2004 12:40	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	7/21/2004 12:00	Ammonia	0.1 mg/L
RIO HONDO 300 YDS BLW STP	8/24/2004 12:00	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	2/11/2004 10:45	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	2/26/2004 13:15	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	3/10/2004 13:40	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	3/24/2004 14:55	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	4/6/2004 12:45	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	4/21/2004 14:10	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	5/19/2004 13:20	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	6/15/2004 12:20	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	7/21/2004 11:35	Ammonia	0.1 mg/L
Rio Hondo 50 feet above WWTP	8/24/2004 11:45	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	2/11/2004 10:20	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	2/26/2004 13:00	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	3/10/2004 13:25	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	3/24/2004 14:00	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	4/6/2004 12:30	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	4/21/2004 13:40	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	5/19/2004 11:45	Ammonia	0.1 mg/L

RHondo abv Lake Fork at Parking Lot	6/15/2004 11:35	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	7/21/2004 11:15	Ammonia	0.1 mg/L
RHondo abv Lake Fork at Parking Lot	8/24/2004 11:30	Ammonia	0.1 mg/L
Lake Fork Creek above Ski Area	5/19/2004 12:10	Ammonia	0.1 mg/L
Twining WWTP effluent @ TSV	2/11/2004 11:30	Ammonia	0.1 mg/L
Twining WWTP effluent @ TSV	3/10/2004 14:00	Ammonia	26.4 mg/L
Twining WWTP effluent @ TSV	3/24/2004 14:40	Ammonia	5.99 mg/L
Twining WWTP effluent @ TSV	4/6/2004 13:00	Ammonia	0.1 mg/L
Twining WWTP effluent @ TSV	4/21/2004 15:05	Ammonia	0.1 mg/L
Twining WWTP effluent @ TSV	5/19/2004 13:00	Ammonia	0.1 mg/L
Twining WWTP effluent @ TSV	8/24/2004 12:10	Ammonia	0.1 mg/L