Appendix III. Species List of Aquatic Invertebrates and Community Metrics provided by the New Mexico Environment Department Oversight Bureau, 1999.

WATERSHED	Los Alamos Canyon		Pajarito Canyon & Tributaries					Upper Sandia Canyon				Valle
	above & below reservoir											
STATION	LA 13.0	LA 12.2	PA 9.0	PA 8.7	PA 6.7	BU 0.0	ST 0.5	SA 10.3	SA 10.1	SA 7.64	SA 7.53	VA 2.6
DATE	25-Feb-97	21-Jun-93	22-Jul-94	22-Jul-94	22-Jul-94	22-Jul-94	22-Jul-94	20-Mar-96	28-Mar-96	20-Mar-96	20-Mar-96	12-May-97
								"wetlands"	"wetlands"			
TAXA												
PLECOPTERA - stoneflies												
Malenka sp.		X										
Suwallia sp.												
Zapada cinctipes		X										
Capniidae	X											
Pteronarcella badia												
Isoperla sp.		X			X							X
Hesperoperla pacifica	X		X	X		X	X					
Perlodinae	X											
Alloperla severa	X			X		X	X					
Amphinemura banksi	X		X	X	X		X					X
Sweltsa sp.			X	X								
EPHEMEROPTERA - mayflies												
Siphlonuridae												
Siphlonurus occidentalis												
Baetis tricaudatus	X	X	X	X	X	X	X		X	X	X	X
Nixe simplicoides	X	X										
Tricorythodes sp.												
Acentrella insignificans	X											
Paraleptophlebia sp.	X	X					X					
Ephemerella inermis												
Ameletus sp.		X	X	X			X					X
Epeorus sp.		X										
Centroptilum sp.					X							
TRICHOPTERA - caddisflies												
Chimarra sp.												
Hydropsyche sp.	X											
Hydropsyche oslari			X	X	X	X				X	X	
Hydropsyche occidentalis												X
Hydroptila sp			X	X	X	X						
Stactobiella sp.												
Hesperophylax sp.	X	X	X	X	X		X			X	X	X
Psychoglypha sp.						X						
Ecclisomyia sp.			X									
Cheumatopsyche sp.												
Leucotrichia sp.												
Alisotrichia sp.												
Brachycentrus americanus												
Limnephilus sp.		X										
Lepidostoma sp.		X			X	X						
Wormaldia sp.												
Rhyacophila sp.							X					

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WATERSHED	Los Alamos Canyon		Pajarito Canyon & Tributaries					Upper Sandia Canyon				Valle
	above & below reservoir											
STATION	LA 13.0	LA 12.2	PA 9.0	PA 8.7	PA 6.7	BU 0.0	ST 0.5	SA 10.3	SA 10.1	SA 7.64	SA 7.53	VA 2.6
DATE	25-Feb-97	21-Jun-93	22-Jul-94	22-Jul-94	22-Jul-94	22-Jul-94	22-Jul-94	20-Mar-96	28-Mar-96	20-Mar-96	20-Mar-96	12-May-97
								"wetlands"	"wetlands"			
TAXA												
Rhyacophila brunea cpx.	X			X		X						
Rhyacophila verrula	X											
Dolophilodes sortosa	X											
Limnephilidae	X											
Oligophlebodes sp.	X											
Leptoceridae	X											
Micrasema sp.	X											
Glossosoma sp.			X	X								
DIPTERA - true flies												
Tipulidae				X								
Tipula sp.						X	X					
Maruina sp.						X						
Antocha monticola	X			X		X	X					X
Dicranota sp.	X	X	X		X	X	X					X
Limonia sp.	X											
Pericoma sp.	X		X			X	X					
Pedicia sp.						X						
Holorusia grandis												X
Simuliidae - black flies									X	X	X	X
Simulium sp.	X	X	X	X	X	X	X					X
Prosimulium sp.		X										
Chironomidae - midges												
Chironomidae A (unidentified midges)										X	X	
Diamesa sp.			X	X				X				X
Pagastia sp.	X		X	X	X	X	X		X			
Orthocladius sp.	X		X		X	X	X	X	X			X
Synorthocladius sp.	X											
Chaetocladius sp.				X	X							
Eukliefferiella sp.	X	X		X	X	X	X	X	X			X
Tvetenia sp.	X	X	X	X	X	X	X	X	X			
Nostococladius sp.	X											
Rheocricotopus sp.	X				X		X					
Brillia sp.		X	X	X	X		X	X	X			
Micropsectra sp.	X				X	X	X	X				X
Parametriocnemus sp.			X		X		X					X
Paraphaenocladius sp.	X					X	X	X	X			
Limnophora sp.												
Thienimeniella sp.									X			
Thienemannimyia sp.					X			X	X			
Cricotopus sp.					X		X	X	X			X
Cryptotendipes sp.								X				
Nilotanypus sp									X			
Tanytarsus sp.								X	X			X

WATERSHED	Los Alamos Canyon		Pajarito Canyon & Tributaries					Upper Sandia Canyon				Valle
	above & below reservoir											
STATION	LA 13.0	LA 12.2	PA 9.0	PA 8.7	PA 6.7	BU 0.0	ST 0.5	SA 10.3	SA 10.1	SA 7.64	SA 7.53	VA 2.6
DATE	25-Feb-97	21-Jun-93	22-Jul-94	22-Jul-94	22-Jul-94	22-Jul-94	22-Jul-94	20-Mar-96	28-Mar-96	20-Mar-96	20-Mar-96	12-May-97
								"wetlands"	"wetlands"			
TAXA												
Cladotanytarsus sp.												X
Paratanytarsus sp.												X
Phaenopsectra sp.									X			
Rheotanytarsus sp.					X							
Polypedilum sp.									X			X
Pseudochironomus sp.												
Microtendipes sp.												
Corynoneura sp.			X			X	X					
Paramerina sp.							X					
Pseudodiamesa sp.							X					X
Boreochlus sp.							X					
Pentaneura sp.												X
Empididae									X			
Chelifera sp.	X								X			X
Oreogeton sp.	X											
Hemerodromia sp.												X
Muscidae									X			
Stratiomyidae												
Euparyphus sp.	X											
Ceratopogonidae - biting midges					X	X		X	X			
Bezzia sp.	X											
Ephydra sp.							X					
Culicidae - mosquitos												
Culiseta sp.												
Dixidae												X
Dixa sp.		X										X
ODONATA - damsel/dragonflies												
Libellulidae												
Libellula sp.												X
Hetaerina sp.												
Coenagrionidae												X
Argia sp.								X	X	X		
Ophiogomphus sp										X	X	X
Oplonaeschna sp.								X		X	X	
HEMIPTERA - true bugs												
Gerris sp.					X							
Ambrysus mormon												
Rhagovelia sp.					X							
Circadellidae					X							
Veliidae												
Sigara sp.												
COLEOPTERA - beetles												
Agabus sp.		X							X			

WATERSHED	Los Alamos Canyon		Pajarito Canyon & Tributaries					Upper Sandia Canyon				Valle
	above & below reservoir											
STATION	LA 13.0	LA 12.2	PA 9.0	PA 8.7	PA 6.7	BU 0.0	ST 0.5	SA 10.3	SA 10.1	SA 7.64	SA 7.53	VA 2.6
DATE	25-Feb-97	21-Jun-93	22-Jul-94	22-Jul-94	22-Jul-94	22-Jul-94	22-Jul-94	20-Mar-96	28-Mar-96	20-Mar-96	20-Mar-96	12-May-97
								"wetlands"	"wetlands"			
TAXA												
Deronectes sp.												
Optioservus sp.	X	X	X	X	X	X				X	X	X
Helichus sp.	X	X	X	X								
Heterelmis sp.					X		X					
Heterelmis corpulentus											X	
Zaitzevia parvula		X										
Narpus sp.	X		X	X			X					
Curculionidae							X					
Microcylloepus sp.												
Dytiscidae					X							
COLLEMBOLA - springtails												
Poduridae							X					
ASCHELMINTHES												
Nematoda							X					
LEPIDOPTERA - moths												
Paragyractis kearfottalis												
Petrophila sp.												X
ARTHROPODA - other arthropods												
Hydrachnidia A - mites	X								X			
AMPHIPODA - scuds												
Hyalella azteca												
ISOPODA - pill bugs												
Asellidae sp.									X			
OSTRACODA - seed shrimp												
Ostracoda								X				
NEMATOMORPHA - Gordian worms												
Gordius sp.									X			
ANNELIDA - segmented worms												
Lumbricidae		X	X	X			X	X	X	X	X	
Tubificidae					X			X	X			
Naididae					X							
Lumbiculidae					X							
MOLLUSCA - snails/clams												
Phusella sp.												
Sphaeriidae	X					X						X
PLATYHELMINTHES - flatworms												
Turbellaria			X	X			X					
Total Taxa	41	23	25	25	32	25	35	17	26	10	10	33

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6
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Table Community Metrics Comparing Upper Los Alamos (LA 13.0) vs Upper Sandia Canyon (SA7.5, SA 7.6, SA 10.1, SA 10.3)

Metric	Stations				
	LA 13.0	SA 7.53	SA 7.64	SA 10.1	SA 10.3
	reference				
Calculated Value					
Standing Crop (No./m2)	10914	1814	1962	13947	1442
No. of Taxa	42	10	10	26	17
BCI(CTQd)	71.4	97.8	99.5	103.5	106.1
HBI	6.05	4.51	4.80	7.91	7.75
EPT Index	18	3	3	1	0
EPT/EPT + Chiron.	0.25	1.00	0.99	0.01	0.00
Community Loss	0	3.80	3.80	1.31	2.18
% Dominant Taxon	32	49	52	56	22
Diversity	3.07	1.57	2.06	2.13	3.44
Scra./Scra.+Filt. Coll.	0.892	0.022	0.083	1.000	0.000
Shredders/Total	0.036	0.015	0.017	0.010	0.032
Percent of Reference					
Standing Crop (No./m2)	100	16	17	127	13
No. of Taxa	100	23	23	61	40
BCI(CTQd)	100	73	71	68	67
HBI	100	100	100	76	78
EPT Index	100	16	16	5	0
EPT/EPT + Chiron.	100	100	100	3	0
Scra./Scra.+Filt. Coll.	100	2	9	100	0
Shredders/Total	100	42	47	28	87
Score					
Standing Crop (No./m2)	6	0	0	6	0
No. of Taxa	6	0	0	4	2
BCI(CTQd)	6	4	4	2	2
HBI	6	6	6	4	4
EPT Index	6	0	0	0	0
EPT/EPT + Chiron.	6	6	6	0	0
Community Loss	6	4	4	4	4
% Dominant Taxon	2	0	0	0	4
Diversity	6	2	4	4	6
Scra./Scra.+Filt. Coll.	6	0	0	6	0
Shredders/Total	6	4	4	2	6
Biological Condition					
Total	62	26	28	32	28
% of Reference	100	41	45	51	45
Condition					

Table Comparison of Community Metrics; Upper Los Alamos (reference) and Upper Pajarito Canyons

Metric	Stations			
	LA 13.0 reference	PA 9.0	PA 8.7	PA 6.7
Calculated Value				
Standing Crop (No./m2)	10914	2589	6562	2913
No. of Taxa	42	25	25	32
BCI(CTQd)	71.4	80.0	77.9	89.1
HBI	6.05	4.38	4.95	4.20
EPT Index	18	10	11	8
EPT/EPT + Chiron.	0.25	0.84	0.79	0.78
Community Loss	0	1.16	1.12	0.94
% Dominant Taxon	32	21	39	55
Diversity	3.07	3.53	2.67	2.63
Scra./Scra.+Filt. Coll.	0.892	0.948	0.961	0.975
Shredders/Total	0.036	0.051	0.023	0.139
Percent of Reference				
Standing Crop (No./m2)	100	23	60	26
No. of Taxa	100	59	59	76
BCI(CTQd)	100	89	91	80
HBI	100	100	100	100
EPT Index	100	55	61	44
EPT/EPT + Chiron.	100	100	100	100
Scra./Scra.+Filt. Coll.	100	100	100	100
Shredders/Total	100	100	62	100
Score				
Standing Crop (No./m2)	6	2	6	2
No. of Taxa	6	2	2	4
BCI(CTQd)	6	6	6	4
HBI	6	6	6	6
EPT Index	6	0	0	0
EPT/EPT + Chiron.	6	6	6	6
Community Loss	6	4	4	4
% Dominant Taxon	2	4	2	0
Diversity	6	6	4	4
Scra./Scra.+Filt. Coll.	6	6	6	6
Shredders/Total	6	6	6	6
Biological Condition				
Total	62	48	48	42
% of Reference Condition	100	77	77	67

Table metric comparisons of Upper Los Alamos (LA 13.0) vs Upper Canyon de Valle (VA 2.6)

Metric	Stations	
	LA 13.0 reference	VA 2.6
Calculated Value		
Standing Crop (No./m2)	10914	3100
No. of Taxa	42	33
BCI(CTQd)	71.4	91.4
HBI	6.05	5.15
EPT Index	18	6
EPT/EPT + Chiron.	0.25	0.66
Community Loss	0	0.91
% Dominant Taxon	32	20
Diversity	3.07	4.03
Scra./Scra.+Filt. Coll.	0.892	0.145
Shredders/Total	0.036	0.165
Percent of Reference		
Standing Crop (No./m2)	100	28
No. of Taxa	100	78
BCI(CTQd)	100	78
HBI	100	100
EPT Index	100	33
EPT/EPT + Chiron.	100	100
Scra./Scra.+Filt. Coll.	100	16
Shredders/Total	100	100
Score		
Standing Crop (No./m2)	6	2
No. of Taxa	6	4
BCI(CTQd)	6	4
HBI	6	6
EPT Index	6	0
EPT/EPT + Chiron.	6	6
Community Loss	6	4
% Dominant Taxon	2	6
Diversity	6	6
Scra./Scra.+Filt. Coll.	6	0
Shredders/Total	6	6
Biological Condition		
Total	62	44
% of Reference	100	70
Condition		