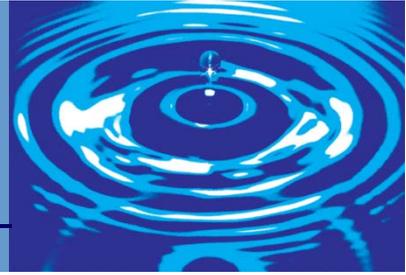




State of New Mexico
Water Quality Control Commission



FINAL DRAFT

2016 - 2018

**State of New Mexico
Clean Water Act
Section 303(d)/Section 305(b)
Integrated
Report**

APPENDIX B –

**Water Quality Impairment
Causes and Probable
Sources**



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Cause Summary for Stream/River Water Quality Impairments	Total Size (miles)
AMMONIA Ammonia, total	49.08 49.08
CAUSE UNKNOWN - IMPAIRED BIOTA Benthic macroinvert. community	154.26 154.26
FLOW ALTERATION(S) Low flow alterations	166.99 166.99
MERCURY Mercury, total	111.16 111.16
METALS (OTHER THAN MERCURY) Aluminum, dissolved (old WQC) Aluminum, total rec - chronic Aluminum, total rec -- acute Arsenic, dissolved COPPER, ACUTE COPPER, CHRONIC Cadmium, dissolved Lead, dissolved Sedimentation/Siltation Selenium, total recoverable Thallium, dissolved ZINC, ACUTE	1080.76 192.37 233.26 121 58.67 10.06 25 7.56 7.56 355.04 45.14 24.9 0.2
NUTRIENTS Nutrient/Eutrophication Phosphorus, total	1288.05 1264.55 23.5
ORGANIC ENRICHMENT/OXYGEN DEPLETION Dissolved oxygen	314.79 314.79
PATHOGENS E. coli	1176.92 1176.92
PESTICIDES DDT in fish tissue	140.73 140.73
PH/ACIDITY/CAUSTIC CONDITIONS pH	44.26 44.26
POLYCHLORINATED BIPHENYLS (PCBS) PCB in Fish Tissue PCB in Water Column	565.74 288.22 277.52

RADIATION	137.95
Gross alpha, adjusted	117.1
Radium 226	7.04
Radium 228	7.04
Uranium, dissolved	6.77
SALINITY/TOTAL DISSOLVED SOLIDS/CHLORIDES/SULFATES	407.9
Specific conductance	275.6
Sulfates	54.59
Total dissolved solids	77.71
TEMPERATURE	1773.46
Temperature	1773.46
TOXIC INORGANICS	70.91
Boron, dissolved	48.23
Cyanide, total recoverable	22.68
TURBIDITY	633.37
Turbidity	633.37

Cause Summary for Lake/Reservoir Water Quality Impairments	Total Size (miles)
MERCURY	50788.35
Mercury in fish tissue	50788.35
METALS (OTHER THAN MERCURY)	5450.19
Aluminum	3783.43
Arsenic, dissolved	1666.76
NUTRIENTS	12913.19
Nutrient/Eutrophication	12913.19
ORGANIC ENRICHMENT/OXYGEN DEPLETION	1332
Dissolved oxygen	1332
PESTICIDES	2423.45
DDT in fish tissue	2423.45
PH/ACIDITY/CAUSTIC CONDITIONS	126.13
pH	126.13
POLYCHLORINATED BIPHENYLS (PCBS)	21754.8
PCB in Fish Tissue	21754.8
TEMPERATURE	17842.36
Temperature	17842.36

Source Summary for Stream/River Water Quality Impairments	Total Size (miles)
AGRICULTURE	2612.34
ANIMAL FEEDING OPERATIONS (NPS)	143.09
Agriculture	72.66
Confined Animal Feeding Operations (CAFOs)	64.25
Crop or Dry Land Construction	89.03
Irrigated Crop Production	204.46
Livestock (Grazing or Feeding Operations)	273.62
Rangeland Grazing	1765.23
AQUACULTURE	12.9
AQUACULTURE (PERMITTED)	12.9
CONSTRUCTION	187.8
CONSTRUCTION	4.96
LAND DEVELOPMENT	3.19
Road/Bridge/Infrastructure Construction	54.1
Site Clearance (New Development or Infill)	125.55
HABITAT ALTERATIONS (NOT DIRECTLY RELATED TO HYDROMODIFICATION)	852.4
Habitat Modification	199.52
Loss of Riparian Habitat	638.39
REMOVAL OF RIPARIAN VEGETATION	14.49
HYDROMODIFICATION	1675.83
Baseflow Depletion	66.32
Channelization	241.29
DREDGING - AGRICULTURE	87
Dam or Impoundment	84.74
Dredging for Navigation Channels	10.01
Flow Alterations from Water Diversions	596.87
STREAMBANK MODIFICATION/DESTABILIZATION - AGRICULTURE	16.83
Streambank Modifications/destabilization	572.77
INDUSTRIAL	57.49
Mill Tailings	16.7
Petroleum/Natural Gas Activities (Permitted)	34.99
RCRA Hazardous Waste Sites	5.8
MUNICIPAL DISCHARGES/SEWAGE	1080.83
Municipal Point Source Discharges	378.14
On-site Treatment Systems (Septic)	702.69

NATURAL/WILDLIFE	2104.2
Drought-related Impacts	731.46
Natural Sources	327.18
Waterfowl	437.21
Wildlife Other than Waterfowl	608.35
OTHER	309.53
Low Water Crossing	277.73
Rural (Residential Areas)	31.8
RECREATION AND TOURISM (NON-BOATING)	502.05
Off-road Vehicles	44.81
Recreational Pollution Sources	457.24
RESOURCE EXTRACTION	105.41
ACID MINE DRAINAGE	8.33
Abandoned Mine Lands	19.99
MINING	10.85
Mine Tailings	15.12
Mining Reclamation	5.8
Petroleum/Natural Gas Activities	34.99
Surface Mining	10.33
SILVICULTURE (FORESTRY)	558.99
Forest Roads (Road Construction and Use)	88.83
SILVICULTURE ACTIVITIES	86.65
Silviculture Fire Suppression	97.4
Silviculture Harvesting	113.78
Watershed Runoff following Forest Fire	172.33
SPILLS/DUMPING	156.36
ILLEGAL DUMPS OR OTHER INAPPROPRIATE WASTE DISPOSAL	16.83
Inappropriate Waste Disposal	139.53
UNKNOWN	4753.36
Source Unknown*	4753.36
URBAN-RELATED RUNOFF/STORMWATER	1490.53
Impervious Surface/Parking Lot Runoff	417.68
MS4 Discharges	52.46
Municipal (High Density Area)	68.86
Road/Bridge Runoff	680.95
Urban Runoff/Storm Sewers	39.36
Wastes from Pets	231.22

NOTES:

This information is generated using SQUID. In most instances, more than a single cause or source contributed to water quality impairment. Where waterbodies have more than one cause or source of impairment, the appropriate waterbody size is entered in each category

* Any new impairment listing are assigned a Probable Source of “Source Unknown.” For the 2014 listing cycle, SWQB removed previously-reported non-TMDL Probable Source lists from the Report List, and replaced them with “Source Unknown” for consistency throughout the list with respect to this approach. Therefore, all reported Probable Source lists on the Integrated List now have been through the TMDL process. Based on SWQB’s approach for determining probable sources, and the fact that the state has not yet written any lake TMDLS, all lake and reservoir impairments have been assigned a probably source of “source unknown”. However, it is likely that atmospheric deposition of toxics will continue to be the dominant probable source, as was indicated in the 2012 Integrated Report (<http://www.nmenv.state.nm.us/swqb/303d-305b/2012-2014/2012-2014USEPA-ApprovedNMReport.pdf>).