

ATTACHMENT 3

**(Supplemental Documentation to the: Mogollon Rim Water Resource
Management Study Report of Findings)**

A Summary of the Town of Payson's 2006 Water Quality Analysis

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A SUMMARY OF THE TOWN OF PAYSON'S 2006 WATER QUALITY ANALYSIS

The Town of Payson performs an annual Water Quality Survey of its drinking water sources – groundwater, as required by Arizona Department of Environmental Quality. Similarly, other water service providers, in the Study Area, are required to provide their customers with an annual Consumer Confidence Reports that reports similar water quality information as found in Payson's Annual Water Quality Survey. It is assumed that the water quality of Payson's groundwater is similar to the groundwater quality throughout the Study Area since most groundwater sources are taken from the same geologic formations. The one item that the Town tests for and will not be repeated in the table immediately below is the data gathered for biological monitoring. The smaller communities' wastewater is processed by septic systems. These systems may contaminate local water supplies. Hence, the biological condition of a community's water supply should be established on a community by community basis. Table I.-1. presents a summary of the 2006 water quality analysis of the Town's water supply.

Table I.-1. A Summary of the Town of Payson's 2006 Water Quality Analysis.

Primary Drinking Water Standards – Mandatory Health-Related Levels Established by EPA and ADEQ					
Parameter	Unit	MCL	MCLG	Remarks	
Lead & Copper	Ppb/ppb	---	---	Town-wide source level range = <0.5 – 19; Town-wide source level range = <0.0002 – 0.25	
Radiochemical Monitoring				Highest Average	Range
Gross Alpha	pCi/l			13.9	1.8 – 13.9
Combined Radium	pCi/l			1.6	N.D. – 1.6
Regulated Inorganic Compounds				Highest Detected Level	Range
Arsenic	ppb	10	0	40	N.D. – 40
Barium	ppm	2	2	0.14	0.04 – 0.14
Chromium	ppb	100	100	5	N.D. – 5
Fluoride	ppm	4	4	1.8	0.2 – 1.8
Nitrate (as N)	ppm	10	10	4.8	N.D. – 4.8
Regulated Organic Compounds				Highest Detected Level	Range
Di(2-EthylHexyl) Phthalate	ppb	20	20	0.8	N.D. – 0.8
Tetrachloroethylene	ppb	5	0	1.4	N.D. – 1.4
Toluene	ppm	1	1	0.003	N.D. – 0.003

Xylenes, Total	ppm	10	10	0.003	N.D. – 0.003
Disinfection Byproduct Monitoring				Highest Average	Range
Total Trihalomethane	ppb	80	0	9.1	N.D. – 12.5
Haloacetic Acids	ppb	60	N/A	1.9	N.D. – 2.7
Secondary Drinking Water Standards – Aesthetic Levels Established by EPA and ADEQ					
Unregulated Inorganic Compounds				Range	
Alkalinity	ppm	--	--	103 – 353	
Calcium	ppm	--	--	28 – 84	
Chloride	ppm	--	--	7.5 – 77	
Hardness, total	ppm	--	--	111 – 325	
Iron	ppm	--	--	N.D. – 4.9	
Magnesium	ppm	--	--	10 – 31	
Manganese	ppm	--	--	N.D. – 0.31	
Nickel	ppm	--	--	N.D. – 0.011	
pH	SU	--	--	6.9 – 7.7	
Sodium	ppm	--	--	13 – 45	
Sulfate	ppm	--	--	5.2 – 22	
Total Dissolved Solids	ppm	--	--	190 – 440	
Zinc	ppm	--	--	0.005 – 3.3	
Key to Table					
MCL – Maximum Contaminant Level MCLG – Maximum Contaminant Level Goal (<) Less than the amount indicated	Limits are not set for these parameters. Range – Low to high measurements reported during the year pCi/l – PicoCuries per liter			N.D. Not Detected ppm -- Parts per million ppb – Parts per billion	

The Town of Payson Water Department tested all active water sources during 2001, for the following contaminants:

2,4 – Dinitrotoluene	EPTC
2,6 -- Dinitrotoluene	Molinate
Acetochlor	MTBE
DCPA Mono-acid degradate	Nitrobenzene
DCPA Di-acid degradate	Perchlorate
4,4' – DDE	Terbacil

Payson has reported that none of these contaminants were detected in its drinking water.

A potential water quality issue that may exist in those communities that are totally on septic or similar type waste water treatment and disposal systems. The issue is that there is a potential for water supply impairment. The water supply impairment could be caused by the percolation of human and other waste entering into the local ground water supply. A study should be undertaken to determine if human waste is impairing a local ground water supply.

ATTACHMENT 4

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Legal and Institutional Considerations

