APPENDIX 3-1

DESIGNATED USES FOR NAVIGABLE WATERS

Arizona Administrative Code (A.A.C) Title 18, Chapter 11 establishes rules concerning water quality boundaries and standards for surface water. The rules include: antidegradation; narrative standards; numeric standards for toxic substances; radiochemicals, and nutrients; designated uses for streams; numeric standards for designated uses; "unique waters" and "Effluent Dominated Waters" (EDW) classifications and standards; and other specific limitations or exceptions.

New surface water rules were certified for Arizona in February 1992. The goals of the CWA provide for protection and propagation of balanced population of shellfish, fish, and wildlife, and allow recreational activities in and all navigable waters. To meet these goals, Arizona Revised Statute 49-221.D requires that water quality standards be expressed in terms of uses to be protected. Major classes of protected uses are established by A.A.C. R18-11-207 are:

Domestic Water Source (DWS):

Designated use of a navigable water as a potable water supply. Coagulation, sedimentation, filtration, disinfection and other treatments may be necessary to yield a finished water suitable for human consumption.

Full Body Contact (FBC):

Designated use of a navigable water for an activity which causes the human body to come into direct contact with the water to the point of complete submergence. The use is such that ingestion of the water is likely to occur and certain sensitive body organs, such as the eyes, ears or nose may be exposed to direct contact with the water.

Partial Body Contact (PBC):

Designated use of a navigable water which may cause the human body to come into direct contact with the water but normally not to the point of complete submergence. The use is such that ingestion of the water is not likely to occur nor will sensitive body organs such as the eyes, ears or nose normally be exposed to direct contact with the water.

Aquatic and Wildlife (warm-water fishery) ($A\&W_w$):

Designated use of a navigable water by animals, plants or other organisms, excluding salmonids, for habitation, growth or propagation.

Aquatic and Wildlife (cold-water fishery) ($A\&W_c$):

Designated use of a navigable water by animals, plants or other organisms, excluding salmonids, for habitation, growth or propagation.

Aquatic and Wildlife (effluent dominated water) ($A\&W_{edw}$):

Designated use of an effluent dominated water by animals, plants or other organisms for habitation, growth or propagation.

Aquatic and Wildlife (ephemeral waters) ($A\&W_e$):

Designated use of an ephemeral water by animals, plants or other organisms, excluding fish, for habitation, growth or propagation.

Agricultural Irrigation (AgI):

Designated use of a navigable water for irrigation farming.

Agricultural Livestock Watering (AgL):

Designated use of a navigable water as a supply of water for consumption by livestock.

Fish Consumption (FC):

Designated use of a navigable water by humans for harvesting aquatic organisms for consumption. Harvestable aquatic organisms include, but are not limited to: fish, clams, turtles, crayfish and frogs.

Reference: AAC R18-11-101 and 104, effective February 18, 1992.

APPENDIX 3-2

SURFACE QUALITY WATER STANDARDS

Narrative Water Quality Standards (Reference: R18-11-108)

A. Navigable waters shall be free from pollutants in amounts or combinations that:

1. Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life or that impair recreational uses;

2. Cause objectionable odor in the area in which the navigable water is located;

3. Cause off-taste or odor in drinking water;

4. Cause off-flavor in aquatic organisms or waterfowl;

5. Are toxic to humans, animals, plants or other organisms;

6. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth or propagation of other aquatic life or that impair recreational uses;

7. Cause or contribute to a violation of an aquifer water quality standard (prescribed in A.A.C. R18-11-405 and A.A.C. R18-11-406); or,

8. Change the color of the navigable water from natural background levels of color.

B. Navigable waters shall be free from oil, grease and other pollutants that float as debris, foam, or scum; or that cause a film or iridescent appearance on the surface of the water; or that cause a deposit on a shoreline, bank, or aquatic vegetation. The discharge of lubricating oil or gasoline associated with the normal operation of a recreational watercraft shall not be considered a violation of this narrative standard.

Numeric Water Quality Standards (Reference: R18-11-109)

A. The water quality standards prescribed in this section and in Appendix A apply to listed navigable waters and their tributaries. Additional standards are prescribed for unique waters and effluent dominated waters.

B. The following standards for fecal coliform, expressed in colony forming units per 100 milliliters of water (cfu/100 ml), shall not be exceeded:

	DWS,PBC,A&W[1],AgI,AgL	FBC
• 30-Day geometric mean (5 Sample minimum)	200	1000
• 10 percent of samples for a 30 Day period	400	2000
• Single sample maximum	800	4000

C. The following water quality standards for pH, expressed in standard units, shall not be violated:

	DWS	FBC/PBC/A&W[2]		AgI	AgL
Maximum	9.0	9.0		9.0	9.0
Minimum	5.0	6.5	4.5	6.5	
Maximum change due to discharge	NNS	0.5	NNS	NNS	

D. The following maximum allowable increase in ambient water temperature[3], expressed in degrees Celsius, shall not be exceeded:

	$A\&W_w$, $A\&W_{edw}$	$A\&W_c$
Maximum increase due to discharge[4]	3.0	1.0

E. The following water quality standards for turbidity, expressed as a maximum concentration in nephelometric turbidity units (NTU), shall not be exceeded:

	FBC, PBC, $A\&W_w$, $A\&W_{edw}$	$A\&W_c$
Rivers, streams and other flowing waters	50	10
Lakes, reservoirs, tanks and ponds	25	10

F. The dissolved oxygen concentration[5] in a navigable water shall not fall below the following minimum concentrations, expressed in milligrams per liter (mg/L):

	$A\&W_w$	$A\&W_c$	$A\&W_{edw}$
Single sample minimum [6,7]	6.0	7.0	1.0

G. The following water quality standards for total phosphorus and total nitrogen, expressed in milligrams per liter (mg/L), shall not be exceeded:

San Pedro River, from Curtis to Benson:

Mean	Annual Percentile	90th Maximum	Single Sample
Total phosphorus	NNS	NNS	NNS
Total nitrogen	NNS	NNS	10.00

H. The following water quality standards for radiochemicals shall not be exceeded:

1. In all navigable waters, the concentration of radiochemicals shall not exceed the limits established by the Arizona Radiation Regulatory Agency in A.A.C. Title 12, Chapter 1, Article 4, Appendix A, Table II, Column 2.

2. In navigable waters that are designated as domestic water sources, the following water quality standards for radiochemicals shall not be exceeded:

   a) The concentration of gross alpha particle activity, including radium-226 but excluding radon and uranium, shall not exceed 15 picocuries per liter of water.

   b) The concentration of combined radium-226 and radium-228 shall not exceed 5 picocuries per liter of water.

   c) The concentration of strontium-90 shall not exceed 8 picocuries per liter of water.

   d) The concentration of tritium shall not exceed 20,000 picocuries per liter of water.

   e) The average annual concentration of beta particle activity and photon emitters from man-made radionuclides shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirems per year.

Footnotes and Abbreviations

[1] Includes A&W$_c$, A&W$_w$ and A&W$_e$.

[2] Includes A&W$_c$, A&W$_w$, A&W$_{edw}$ and A&W$_e$.

[3] There is no water quality standard for temperature for the A&W$_e$ designated use.

[4] Does not apply to a wastewater treatment plant discharge to a dry watercourse that creates an effluent dominated water.

[5] There is no dissolved oxygen standard for the A&W$_e$ designated use.

[6] Or 90 percent saturation, whichever is less.

[7] The dissolved oxygen water quality standard for a lake shall apply below the surface but not at a depth >1 meter.

NNS - No numeric standard.

APPENDIX 3-3

STATE OF ARIZONA UNIQUE WATERS CRITERIA

A navigable water may be classified as a unique water by the Director of ADEQ upon a finding that the navigable water is an outstanding state resource based upon one of the following criteria:

1. The navigable water is of exceptional recreational or ecological significance because of its unique attributes, including but not limited to, attributes related to the geology, flora, fauna, water quality, aesthetic values, or the wilderness characteristics of the navigable water.

2. Threatened or endangered species are known to be associated with the navigable water and the existing water quality is essential to the maintenance and propagation of a threatened or endangered species or the navigable water provides critical habitat for a threatened or endangered species. Endangered or threatened species are identified on the following lists:

    a) Endangered or Threatened Wildlife and Plants, 50 CFR, 17.11 and 17.12 (revised as of July 15, 1991).

    b) "Threatened Wildlife of Arizona" Arizona Game and Fish Department (July 21, 1988).

    c) List of protected groups of plants prescribed in A.A.C. R3-1-615 and A.A.C. R3-1-616 (January 17, 1989).

    d) List of Migratory Birds, 50 CFR 10.13 (April 5, 1985).

    e) "Endangered and Threatened Species of Arizona," U.S. Fish and Wildlife Service (summer 1991).

STANDARDS FOR UNIQUE WATERS IN THE SEAGO REGION

The following water quality standards apply to the listed unique waters and supplement or supersede the water quality standards listed in Appendix B.

Bonita Creek, Tributary to the Upper Gila River:

This unique water has the same numeric water quality standards as prescribed in R18-11-109 and listed in Appendix 3-2.

Reference: AAC R18-11-112, effective February 18, 1992.

APPENDIX 3-4

STATE OF ARIZONA STANDARDS FOR EFFLUENT DOMINATED WATERS

The following standards apply to effluent dominated waters:

(1) Fecal Coliform

30-Day geometric mean (5 sample minimum)	200 cfu/100 ml
10 Percent of samples for a 30-day period	400 cfu/100 ml
Single sample maximum	800 cfu/100 ml

(2) Dissolved Oxygen

For effluent dominated waters designated for $A\&W_{edw}$ use:

Single sample minimum	1.0 mg/L

(3) Temperature

The standard limiting the maximum increase in temperature due to a discharge does not apply to a Wastewater Treatment Plant discharge to a dry watercourse that creates an effluent dominated water.

(4) Turbidity

For effluent dominated water designated for $A\&W_{edw}$ use:

Rivers, streams and other flowing waters
50 NTU
Lakes, reservoirs, tanks and ponds
20 NTU

(5) pH

For effluent dominated water designated for $A\&W_{edw}$ use:

Maximum	9.0
Minimum	6.5
Maximum change due to discharge	NNS

cfu/ml means colony forming units per milliliter
NTU mean nephelometric turbidity unit
NNS means no numeric standard

Reference: AAC R18-11-109, effective February 18, 1992.

APPENDIX 3-5

RIPARIAN AREAS AND AREAS OF CRITICAL ENVIRONMENTAL CONCERN IN THE SEAGO REGION

1. Apache Creek and Tributary
2. San Francisco River
3. Eagle Creek and Tributary
4. Bonita Creek
5. Johnny Creek
6. Left Fork of Markham Creek
7. Riparian Areas in the Gila Mtns.
8. Black Rock Wash
9. Goodwin Wash
10. Laurel Canyon
11. Deer Creek and Tributaries
12. Turkey Creek
13. Oak Grove Canyon
14. Aravaipa Creek and Tributaries
15. Redfield Canyon and Tributaries
16. Swamp Springs Creek
17. Cherry Springs Creek
18. Hot Springs Creek
19. Wildcat Creek
20. Double R Creek
21. Bass Creek
22. Robles Creek
23. Upper San Pedro River and Tributaries
24. Babocomari River
25. Riparian Areas in Mule Mtns.
26. Guadalupe Creek
27. Riparian Areas in Bowie Mtns.
28. Riparian Area in Dos Cabezas Mtns.
29. Riparian areas in San Simon Valley

AREAS OF CRITICAL ENVIRONMENTAL CONCERN, ALTERNATIVE 1

Gila Box - ONA, ACEC
Turkey Creek Riparian - ACEC
Table Mountain - RNA, ACEC
Desert Grasslands - RNA, ACEC
Swamp Springs/Hot Springs Watershed - ACEC
Bear Springs Badlands - ACEC
Guadalupe Canyon ONA - ACEC
Bowie Mountain Scenic - ACEC
Coronado Mountain - RNA, ACEC
Dos Cabezas Peaks - ACEC
Eagle Creek Bat Cave - ACEC
Willcox Playa National Natural Landmark - ACEC
111 Ranch - RNA, ACEC

POTENTIAL ACECS IN OTHER ALTERNATIVES TO THE SAFFORD PLAN

Aravaipa Creek Watershed - ACEC
Black Rock RNA - ACEC
Bonita Creek - ACEC
Bonita Creek Watershed - ACEC
Peloncillo Mountain - ONA, ACEC
Muleshoe Ranch - ACEC
St. David Cienega - RNA, ACEC
San Pedro River - RNA, ACEC
San Pedro Riparian National Conservation Area
San Rafael - RNA, ACEC
San Bernardino National Wildlife Refuge - Swiss Helms
San Bernardino National Wildlife Refuge - Douglas

APPENDIX 3-6
STATE OF ARIZONA WATER QUALITY ASSESSMENT REPORT FOR SEAGO
SURFACE WATER DATA

Reach Number or Lake ID Number	Reach/Lake, Segment Description Site Description (Site ID)	Agency Study Name Sampling Dates	Number of Samples Description	Parameter	Standard Or Criteria	Levels Violating Standards/Criteria	Sample(s) Violating Standards or Criteria	Use Support
RIOS DE MEXICO BASIN								
15080302-002	Guadalupe Cyn, New Mexico-Mexico @ Mexico border	BLM/Safford Watershed Monitoring 5/8/91	1	Mercury	0.2 ug/l	0.2 ug/l	1(100%)	Non-sup. A&W
15080301-004	Mule Gulch hdwtr-Whitewater Draw @ Elfrida Cutoff (MG1)	ADEQ Fixed Station 1990	1	Ammonia	0.02 mg/l	0.112 mg/l	1(100%)	Non-sup. A&W (very low flow)
	Mule Gulch hdwtr-Whitewater Draw @Inn at Castle Rock (MG2)	ADEQ Fixed Station 1990	1	no exceedance				Full support (very low flow)
SANTA CRUZ RIVER BASIN								
15050301-009 off	Peck Canyon Cr, hdwt-Santa Cruz near Rio Rico	ADEQ Fixed Station 4/4/1991	1	no exceedance				Full
15050301-010	Santa Cruz, Nogales-Sonoita (before POTW)	IBWC 1991	2 sites	Mercury	0.2 ug/l	0.2 ug/l	1 site	Non-sup. A&W
	Santa Cruz, Nogales-Sonoita @ Rio Rico (SC2)	ADEQ Fixed Station 1990-1991	12	Chromium Fecal coliforms	0.05 mg/l 4,000 CFU	0.060 mg/l 14,000 CFU	1(14%) 1(11%)	Non-sup. EDW,A&W Partial A&W,IHC,AGI,AGL,EDW
15050301-011	Nogales Wash, Mexico-S.Cruz @ Morley St Tunnel (SC4)	ADEQ Fixed Station 1990-1991	14	Fecal coliforms Un-ionized ammonia Turbidity	4,000 CFU 0.02 mg/l 50 NTU	4,400-1.5 million CFU 0.176-0.347 mg/l 56 NTU	5(50%) 3(25%) 1(7%)	Non-sup. A&W,AGI,AGL Partial A&W Full
15050301-011 off	Cerro Pelon W, hdwt-Nogales Wash @ Mexico border	Santa Cruz Co. Health Nogales Wash Inv. 1990	3 Bacteria only	Fecal coliforms	4,000 CFU	13,000-16,000 CFU	2(66%)	Non-sup. A&W,AGI,AGL

	Cerro Pelon W, hdwt-Nogales Wash @ Morley Ave	Santa Cruz Co. Health Nogales Wash Inv. 1990	2 Bacteria only	no exceedance				
15050301-011	E.Channel Nogales Wash, Mexico bdr-Santa Cruz @ Mexico bdr (before Cl)	Santa Cruz Co. Health Nogales Wash Inv. 1990	22 Bacteria only	Fecal coliforms	4,000 CFU	8,000-7 million CFU	21(95%)	Non-sup. A&W,AGI,AGL
off	E.Channel Nogales Wash, Mexico bdr-Santa Cruz @ Morley Ave (before Cl)	Santa Cruz Co. Health Nogales Wash Inv. 1990	38 Bacteria only	Fecal coliforms	4,000 CFU	16,000-16 million CFU	15(40%)	Non-sup. A&W,AGI,AGL
15050301-011 off	Las Cuevitas W, hdwt-Nogales Wash @ Nogales Wash	Santa Cruz Co. Health Nogales Wash Inv. 1990	1 Bacteria only	no exceedance				
15050301-011 off	Las Cuevitas W, hdwt-Nogales Wash @ Mexico border	Santa Cruz Co. Health Nogales Wash Inv. 1990	3 Bacteria only	no exceedance				
15050301-011 off	Nogales Wash, Mexico-S.Cruz @ 7 locations	ADEQ 1990-1991	Total mets only	Cyanide Mercury	0.02 mg/l 0.2 ug/l	0.02-0.027 mg/l 0.2-0.7 ug/l	2 sites 2 sites	Non-sup. A&W Non-sup. A&W
	Nogales Wash, Mexico-S.Cruz @ Doe St (after Chlor)	Santa Cruz Co. Health Nogales Wash Inv. 1990	22 Bacteria only	Fecal coliforms	4,000 CFU	160,000-1.8 million CFU	1(5%)	Full
15050301-011 off	Potrero Cr, hdwt-Nogales Wash @ MHP on W. Frontage Rd	Santa Cruz Co. Health Nogales Wash Inv. 1990	3 Bacteria only	no exceedance				
15050301-011 off	Trickey W, hdwt-Nogales Wash @ Mexico bdr (before Cl)	Santa Cruz Co. Health Nogales Wash Inv. 1990	10 Bacteria only	Fecal coliforms	4,000 CFU	34,000-16 million CFU	10(100%)	Non-sup. A&W,AGI,AGL
	Trickey W, hdwt-Nogales W. @ Mexico bdr (after Cl)	Santa Cruz Co. Health Nogales Wash Inv. 1990	6 Bacteria only	Fecal coliforms	4,000 CFU	160,000-3 million CFU	5(83%)	Non-sup. A&W,AGI,AGL
15050301-011 off	W.Channel Nogales, Mexico bdr.-Santa Cruz (before Chlorination)	Santa Cruz Co. Health Nogales Wash Inv.	4 Bacteria only	Fecal coliforms	4,000 CFU	160,000-9 million CFU	4(100%)	Non-sup. A&W,AGI,AGL

		1990						
	W.Channel Nogales Wash, Mexico bdr.-Santa Cruz (after chlorination)	Santa Cruz Co. Health Nogales Wash Inv. 1990	5 Bacteria only	no exceedance				
15050301-012	Santa Cruz, Mexico bdr-B* @ Mexico border (SC5)	ADEQ Fixed Station 1990-1991	12	no exceedance				Full
15050301-012 off	Providencia Cyn, hdwt-S. Cruz	USFS Coronado National Forest 1991	1	no exceedance				Full
15050301-012 off	Santa Cruz, hdwt-Mexico bdr @ Lochiel (SC13)	ADEQ Fixed Station 1990-1991	4	no exceedance				Full
15050301-013	Sonoita Cr, hdwt-Santa Cruz blw Patagonia POTW(SC6)	ADEQ Fixed Station 1990-1991	14 (spring fed)	Dissolved Oxygen Un-ionized ammonia	6.0 mg/l 0.02 mg/l	4.45-5.7 mg/l 0.0256-0.244 mg/l	6(50%) 2(14%)	Non-sup A&W,IHC Partial A&W

SAN PEDRO RIVER BASIN								
15050202-003	San Pedro, Babocomari-Dragoon @ Curtis Siding (SP7)	ADEQ Fixed Station 1990-1991	3 (Flood 1)	Copper(t) Fecal coliforms Lead Mercury Turbidity	500 ug/l 4,000 CFU 100 ug/l 0.2 ug/l 50 NTU	800 ug/l 13,000 CFU 220 ug/l 0.3 ug/l 2,500 NTU	1(30%) 1(100%) 1(30%) 1(30%) 1(30%)	Partial AGL Non:A&W,IHC,AGI,AGL Non-sup. AGL Non-sup. A&W Non-sup. A&W,IHC
	San Pedro, Babocomari-Dragoon @St David 0.8 mi So (SP5)	ADEQ Fixed Station 1990-1991	8	Un-ionized ammonia	0.02 mg/l	0.0224-0.111 mg/l	2(25%)	Partial A&W
	San Pedro, Babocomari-Dragoon @St David Hwy-80 (SP2)	ADEQ Fixed Station 1990-1991	10	Copper Fecal coliforms Lead Mercury Un-ionized ammonia Turbidity Total Nitrogen	0.5 mg/l 4,000 CFU 100 ug/l 0.2 ug/l 0.02 mg/l 50 NTU 10.0 mg/l	0.7-3.93 mg/l 5,000-9,200 CFU 210-810 ug/l 0.3-1.2 ug/l 0.0324-0.136 mg/l 140-2,400 NTU 13.4-26.6 mg/l	2(17%) 2(34%) 2(17%) 3(30%) 8(80%) 3(25%) 10(100%)	Partial AGL Non:IHC,A&W,AGI,AGL Partial AGL Non-sup. A&W Non-sup. A&W Partial A&W,IHC Non-sup. A&W
15050202-003 off	Banning Cr, hdwt-Babocomari W. of Bisbee Tunnel (BC1)	ADEQ Fixed Station 1990-1991	1	no exceedance				Full
15050202-004	Babocomari R, hdwt-San Pedro @ mouth	BLM/Safford Watershed Monitoring 9/26/1991	1	no exceedance				Full
15050202-004	Babocomari R., Banning-S.Pedro near mouth (BCR1)	ADEQ Fixed Station 1990	5	no exceedance				Full
	Babocomari, Banning-San Pedro near Elgin (BCR2)	ADEQ Fixed Station 1990	6	no exceedance				Full
15050202-004 off	Diamond Wash, hdwt-Babocomari	BLM/Safford Watershed Monitoring 9/27/1991	1	no exceedance				Full
15050202-005	San Pedro, Walnut G-Babocomari (SP10)	ADEQ Fixed Station 1990-1991	6 Flood-1	Copper Lead Mercury Turbidity	500 ug/l 100 ug/l 0.2 ug/l 50 NTU	547 ug/l 120 ug/l 0.6 ug/l 1,700 NTU	1(17%) 1(17%) 1(17%) 1(17%)	Partial AGL Partial AGL Non-sup. A&W Partial A&W,IHC
15050202-006	San Pedro, Mexico-Charleston	USGS Fixed Station	6	no exceedance				Full

	@ Charleston	1991						
15050202-008	San Pedro, Mexico-Charleston (SP11)	ADEQ Fixed Station 1990-1991	7 Flood-1	Copper Lead Mercury Selenium Turbidity	500 ug/l 100 ug/l 0.2 ug/l 0.2 mg/l 50 NTU	886 ug/l 230 ug/l 0.3 ug/l 0.30 mg/l 1,800 NTU	1(14%) 1(14%) 1(14%) 1(14%) 1(14%)	Partial AGL Partial AGL Non-sup. A&W Partial AGI Partial A&W,IHC
	San Pedro, Mexico-Charleston @ Palominas (SP1)	ADEQ Fixed Station 1990-1991	12 Flood-1	Dissolved Oxygen Turbidity	6.0 mg/l 50 NTU	5.72 mg/l 210 NTU	1(11%) 1(10%)	Partial A&W,IHC Full
15050202-011	San Pedro, near Redington (SP12a)	ADEQ Fixed Station 8/13/1991	1	no exceedance				Full
15050202-008 off11	Tombstone W, hdwt-Santa Cruz @ Tombstone Sand & Gravel	ADEQ Complaint Investigations 6/20/1990	1 Oozing tar	Total Petrol Hydrocarbons	100 mg/kg	520,000 mg/kg		Non-sup. A&W,IHC,AGI,AGL
15050203-004	Aravaipa, Rattlesnake-San Pedro @ W. Wilderness boundary	BLM/Safford Watershed Monitoring 5/91-9/91	2	Mercury	0.2 ug/l	0.3 ug/l	1(50%)	Non-sup. A&W
15050203-004 off	Javalina Cyn, hdwt-Aravaipa	BLM/Safford Watershed Monitoring 8/12/1991	1	no exceedance				Full
15050203-004 off	Oak Grove Cyn, hdwt-Aravaipa	BLM/Safford Watershed Monitoring 9/12/1991	1	no exceedance				Full
15050203-006	Aravaipa, hdwt-Rattlesnake @ E. Wilderness boundary	BLM/Safford Watershed Monitoring 5/91-9/91	2	Mercury	0.2 ug/l	0.2 ug/l	1(50%)	Non-sup. A&W
15050203-013	Hot Springs, hdwt-San Pedro (HSC1)	ADEQ Fixed Station 1991	5	no exceedance				Full
15050203-013 off	Bass Cyn, hdwt-Hotsprings	BLM/Safford Watershed Monitoring 2/91-7/91	1 2 sites	Mercury	0.2 mg/l	0.3 mg/l	1(50%)	Non-sup. A&W
15050203-013 off	Wildcat Cyn, hdwt-Hot Springs	BLM/Safford Watershed Monitoring	1	Mercury	0.2 mg/l	0.3 mg/l	1(100%)	Non-sup. A&W

		7/31/1991						
15050203-014	Redfield Cyn, hdwt-San Pedro (RFC1)	ADEQ Fixed Station 1991	4	Dissolved Oxygen	6 mg/l	5.1 mg/l	1(30%)	Non-sup. A&W,IHC
UPPER GILA RIVER BASIN								
15040002-004	Gila R, Bitter Cr-Apache Cr near Redrock New Mexico	USGS Fixed Station 1990-1991	12	Copper(d) Fecal coliforms Turbidity	50 mg/l 4,000 CFU 50 NTU	65 mg/l 4,800 CFU 64-250 NTU	1(10%) 1(8%) 4(36%)	Not sup. A&W Full A&W,IHC
15040004-001	San Francisco River Limestone-Gila @ Clifton	USGS Fixed Station 1990	6	Fecal coliforms Mercury Total Dissolved Solids Turbidity Copper (t) Copper (d)	800 CFU 0.2 ug/l 500 mg/l 10 NTU 500 mg/l 50 mg/l	2,400 CFU 0.2-2.5 ug/l 604 mg/l 280-290 NTU 900 mg/l 72 mg/l	1(20%) 2(40%0 2(25%) 5(62%) 1 (13%) 1 (13%)	Partial FBC Non:A&W;Pt:DWS,FB C Partial DWS Non-sup. CAW, FBC Partial AGL Partial A&W
15040004-025	Blue R., KP Cr-San Francisco near Clifton	USGS Fixed Station 1991	6 Few parameters	Turbidity	18 NTU	22-310 NTU	3(21%)	Partial CAW, IHC
15040004-028	Campbell Blue, hdwt-Blue R.	USFS Apache-Sitgreaves N.F. 1991	3	no exceedance				Full
15040005-011	Gila R., unnamed wash-Salt Creek @ Calva, AZ	USGS Fixed Station 1991	12	Total Dissolved Solids Turbidity	1,000 mg/l 50 NTU	1,060-2,340 mg/l 68-120 NTU	1016 (ave) 4(57%)	Partial AgI Non-sup. A&W,IHC
15040005-012 off	Black Rock Cyn, hdwt-Gila	BLM/Safford Watershed Monitoring 6/25/91	1	no exceedance				Full
15040005-012 off	Fishhooks, hdwt-Gila R.	BLM/Safford Watershed Monitoring 2/13/91	1	no exceedance				Full
15040005-014	Markham Cr, hdwt-Gila R.	BLM/Safford Watershed Monitoring 5/91-9/91	2	Mercury	0.2 ug/l	0.4 ug/l	1(50%)	A&W
15040005-022	Gila R., Bonita Cr-Yuma Wash @ Solomon, Arizona	USGS Fixed Station 1990-1991	12	Mercury Turbidity	0.0002 mg/l 50 NTU	0.0002-1.5 mg/l 65-300 NTU	3(30%) 4(33%)	Non-sup. A&W Non-sup. A&W,IHC

15040005-030	Bonita Cr, Park Cr-Gila R. @ mouth	BLM/Safford Watershed Monitoring 1990-1991	19	Mercury	0.2 ug/l	0.3 ug/l	1(5%)	Non-sup. A&W
15040005-032	Bonita Cr, hdwt-Park Cr near reservation	BLM/Safford Watershed Monitoring 1990-1991	5	pH Total Dissolved Solids	6.5-9.0 1000 mg/l	5.0 1,690 mg/l	1(17%) 1(17%)	Partial A&W,IHC,AGL Partial AGI
15040006-1250	Roper Lake	AGFD Stocking Program 1990-1991	2 sets of 4 samples	pH	6.5-9.0	9.92	2(50%)	Non-sup. A&W,FBC
15040007-001	San Carlos, Aliso-San Carlos Lake @ Peridot, AZ	USGS Fixed Station 1991	6 Few parameters	no exceedance				Full

LEGEND:

Agency: ADEQ = Arizona Department of Environmental Quality, SRP = Salt River Project, USFS = US Forest Service, USGS = US Geological Service, AGFD = Arizona Game and Fish Department, BLM = US Bureau of Land Management, FWS = Fish and Wildlife Service, IBWC = International Boundary Water Commission.

Use Support: A&W = Aquatic and Wildlife, CAW = Coldwater Aquatic and Wildlife, FBC = Full Body Contact, IHC = Incidental Human Contact, DWS = Drinking Water Source, AGI = Agriculture Irrigation, AGL = Agriculture Livestock Watering, UNIQUE = Unique Water, EDW = Effluent Dominated Water.

Source: Arizona Department of Environmental Quality, Arizona Water Quality Assessment 1992, State of Arizona Clean Water Act Section 305(b) Report.

APPENDIX 3-7
WATER QUALITY LIMITED WATERS STATUS FOR TOTAL MAXIMUM DAILY LOAD ANALYSIS - CLEAN WATER ACT SECTION 303(d) LIST

SURFACE WATER BASIN	WATERBODY NAME/LOCATION DESCRIPTION	WATERBODY ID	MILES OR ACRES	TMDL* STATUS
RIOS DE MEXICO	California Gulch, headwater-Mexico border	AZ15080200-000	15.5 M	High
RIOS DE MEXICO	Whitewater Draw, Mexican Border-Mule Gulch	AZ15080301-002	12.7 M	High
RIOS DE MEXICO	Whitewater Draw, Mule Gulch-Elfrida	AZ15080301-004	21.4 M	High
SAN PEDRO	San Pedro River, Babocomari Ck.-Dragoon Wash	AZ15050202-003	14.9 M	High
SAN PEDRO	San Pedro River, Walnut Gulch-Babocomari Ck.	AZ15050202-005	0.5 M	High
SAN PEDRO	San Pedro River, Mexico border-Charleston	AZ15050202-008	27.3 M	High
SAN PEDRO	Walnut Gulch, headwaters-San Pedro River	AZ15050202-009	13.7 M	High
SANTA CRUZ	Santa Cruz River, Nogales Wash-Sonoita Creek	AZ15050301-010	3.0 M	High
SANTA CRUZ	Sonoita Creek, headwaters-Santa Cruz River	AZ15050301-013	30.2 M	High
UPPER GILA	Gila River, Border-Bitter Creek	AZ15040002-004	14.2 M	High
UPPER GILA	San Francisco River, Limestone Gulch-Gila R.	AZ15040004-001	10.7 M	High
UPPER GILA	Chase Creek, headwaters-San Francisco	AZ15040004-001 off 10	11.4 M	High
UPPER GILA	Gila River, Bonita Creek-Yuma Wash	AZ15040005-022	6.0 M	High
RIOS DE MEXICO	Mule Gulch, headwaters-Whitewater Draw	AZ15080301-004 off 6	9.2 M	Medium
RIOS DE MEXICO	Guadalupe Canyon, New Mexico bdr-Mexico bdr	AZ15080302-002	10.0 M	Medium
SAN PEDRO	San Pedro River, Tres Alamos Wash-15050203	AZ15050202-001	6.2 M	Medium
SAN PEDRO	San Pedro River, Dragoon Wash-Tres Alamos W	AZ15050202-002	13.2 M	Medium
SAN PEDRO	Copper Creek, headwaters-San Pedro River	AZ15050203-003 off 12	15.2 M	Medium

SAN PEDRO	San Pedro River, Bollen Wash-Peppersauce Wash	AZ15050203-008	11.8 M	Medium
SAN PEDRO	San Pedro River, Redfield Canyon-Bollen Wash	AZ15050203-009	4.6 M	Medium
SAN PEDRO	San Pedro River, Hot Springs Ck.-Redfield Cyn	AZ15050203-011	13.2 M	Medium
SAN PEDRO	San Pedro River, 15050203-Hot Springs Canyon	AZ15050203-012	13.5 M	Medium
SANTA CRUZ	Santa Cruz River, Josephine Canyon-Sopori W.	AZ15050301-008	13.6 M	Medium
SANTA CRUZ	Santa Cruz River, Sonoita Ck.-Josephine Canyon	AZ15050301-009	6.3 M	Medium
SANTA CRUZ	Nogales Wash, Mexico border-Santa Cruz R.	AZ15050301-011	4.9 M	Medium
SANTA CRUZ	Harshaw Wash, headwaters-Sonoita Creek	AZ15050301-013 off 17S	12.0 M	Medium
UPPER GILA	Gila River, Skully Creek-San Francisco River	AZ15040002-001	13.1 M	Medium
UPPER GILA	Gila River, Apache Creek-Skully Creek	AZ15040002-002	6.0 M	Medium
UPPER GILA	Gila River, Bitter Creek-Apache Creek	AZ15040002-003	2.2 M	Medium
UPPER GILA	San Francisco River, Blue R.-Limestone Gulch	AZ15040004-003	15.0 M	Medium
UPPER GILA	San Francisco River, Border-Blue River	AZ15040004-004	10.00 M	Medium
UPPER GILA	Gila River, Underwood Wash-15040005-036	AZ15040005-012	21.4 M	Medium
UPPER GILA	Gila River, Peck Wash-Underwood Wash	AZ15040005-014	3.8 M	Medium
UPPER GILA	Gila River, Coyote Wash-Peck Wash	AZ15040005-015	3.6 M	Medium
UPPER GILA	Gila River, Watson Wash-Coyote Wash	AZ15040005-016	0.4 M	Medium
UPPER GILA	Gila River, Stockton Wash-Watson Wash	AZ15040005-017	6.6 M	Medium
UPPER GILA	Gila River, San Simon Creek-Stockton Wash	AZ15040005-019	2.00 M	Medium
UPPER GILA	Gila River, Eagle Creek-Bonita Creek	AZ15040005-023	9.0 M	Medium

UPPER GILA	Gila River, San Francisco River-Eagle Creek	AZ15040005-024	3.0 M	Medium
UPPER GILA	Cluff Ranch Pond #3	AZL15040005-0370	10 A	Medium
UPPER GILA	Roper Lake	AZL15040006-1250	32 A	Medium
SAN PEDRO	San Pedro River, Charleston-Walnut Gulch	AZ15050202-006	7.4 M	Low
SAN PEDRO	Aravaipa Creek, Rattlesnake-San Pedro River	AZ15050203-004	31.3 M	Low
SAN PEDRO	Aravaipa Creek, headwaters-Rattlesnake	AZ15050203-006	24.8 M	Low
SAN PEDRO	Redfield Canyon, headwaters-San Pedro R.	AZ15050203-014	18.7 M	Low
SANTA CRUZ	Parker Canyon Lake	AZL15050301-1040	125 A	Low
SANTA CRUZ	Patagonia Lake	AZL15050301-1050	260 A	Low
SANTA CRUZ	Pena Blanca Lake	AZL15050301-1070	45 A	Low
UPPER GILA	Blue River, KP Creek-San Francisco River	AZ15040004-025	27.1 M	Low
UPPER GILA	Blue River, Campbell Blue Creek-KP Creek	AZ15040004-026	18.8 M	Low
UPPER GILA	San Simon Creek, Oak Draw-Gila River	AZ15040006-001	15.0 M	Low
UPPER GILA	San Simon Creek, Gold Gulch-Oak Draw	AZ15040006-003	11.4 M	Low
UPPER GILA	San Simon Creek, Hot Well Draw-Gold Gulch	AZ15040006-005	4.0 M	Low
UPPER GILA	San Simon Creek, Border-Hot Well Draw	AZ15040006-006	35.5 M	Low
SAN PEDRO	Hot Springs Canyon Ck., headwaters-San Pedro	AZ15050203-013	23.3 M	NA
SANTA CRUZ	Santa Cruz River, Mexico border-Nogales Wash	AZ15050301-012	16.4 M	NA
UPPER GILA	Eagle Creek, Sheep Wash-Gila River	AZ15040005-025	33.0 M	NA

LEGEND:

* TMDL = Total Maximum Daily Load

SOURCE: ADEQ Arizona Water Quality Assessment 1992, Clean Water Act 305(b) Report.

APPENDIX 3-8
GROUNDWATER BASIN STATISTICS

PLANNING REGION GROUNDWATER BASIN	GEOGRAPHIC INDICATOR AND POPULATION CENTER	LAND AREA (sq. miles)	POPULATION			POPULATION DENSITY (persons/sq.miles)		LAND USE (1985)			POTENTIAL RECOVERABLE GROUNDWATER TO 1200 FEET (1991) (M ac/ft)	PERCENT GROUND WATER DEMAND (1985) (based on total water demand)
			1990	2000 *	2025 *	1990	2000 *	Irrigated Acreage	Undeveloped Acreage	Urban Acreage		
STATEWIDE TOTALS FOR ARIZONA		113,776	3,718,017	4,804,144	7,641,203	33	43	1,256,932	70,899,260	410,213	1,995.8	
Active Management Region	Phoenix	5,646	2,150,565	2,813,239	4,492,040	381	498	421,668	3,103,432	211,600	160.0	59
Phoenix AMA*	Casa Grande	4,000	68,184	97,988	159,576	17	24	240,000	2,319,100	2,500	90.0	83
Pinal AMA*	Prescott	485	54,308	73,179	131,340	112	151	4,000	374,200	3,000	3.0	94
Prescott AMA*	Tucson	4,600	708,133	897,432	1,419,152	154	195	54,300	2,757,200	65,500	71.0	98
Tucson AMA												
	Regional Total	14,731	2,981,190	3,881,838	6,202,108	202	264	719,968	8,553,932	282,600	324.0	
Southeast Arizona Region	Aravaipa Valley	483	228	292	445		1	894	307,850	56	5.1	18
Aravaipa Canyon Basin	Gila Mountains	493	42	51	79				315,200		1.3	50
Bonita Creek Basin	Patagonia	575	2,254	2,786	4,553	4	5	130	367,500	270	5.1	100
Cienega Creek Basin		223	117	151	251	1	1		143,000		0.1	100
Donnelly Wash Basin*	Douglas	931	29,414	37,503	58,322	32	40	9,800	584,900	1,200	32.0	100
Douglas Basin	Christmas	445	200	229	298		1	100	284,000		0.2	100
Dripping Spring Wash	Duncan	553	2,090	2,157	1,994	4	4	8,060	345,600	140	19.0	34
Basin*	Winkleman	1,394	20,306	23,573	34,628	15	17	6,170	883,000	2,830	25.6	55
Duncan Valley Basin	Clifton	1,645	7,045	7,476	7,376	4	5	500	1,051,300	1,500		37
Lower San Pedro Basin	Safford	4,854	31,923	38,630	57,543	7	8	42,610	3,056,600	7,390	66	55
Morenci Basin	Chiricahua	328	226	289	449	1	1		209,700		1.6	100
Safford Basin	Parker Canyon	246	236	288	447	1	1		157,200			100
San Bernardino Valley	Lake	1,779	66,535	83,689	128,048	37	47	13,912	1,124,688	1,000	59.0	82
Basin	Bisbee	1,911	12,255	15,562	24,173	6	8	19,160	1,179,200	2,340	45.3	44
San Raphael Basin	Willcox											
Upper San Pedro Basin												
Willcox Basin												
	Regional Total	15,860	172,871	212,676	318,606	11	13	101,336	10,009,738	16,726	260.3	

LEGEND:
* Not part of the SEAGO region.
A portion of Santa Cruz County falls within the Tucson AMA.

SOURCE: ADEQ Arizona Water Quality Assessment 1992, Clean Water Act 305(b) Report.

APPENDIX 3-9

AQUIFER WATER QUALITY STANDARDS

Arizona's aquifers have all been classified and protected for drinking water use. ADEQ has established Aquifer Water Quality Standards consisting of EPA drinking water standards, and may adopt other standards as well.

Narrative Aquifer Water Quality Standards (AAC R18-11-405)
ADEQ has developed narrative water standards which allow regulation of pollutant discharges for which no numeric standards have been adopted. These narrative standards are:

a. A discharge shall not cause a pollutant to be present in an aquifer in a concentration which endangers human health.

b. A discharge shall not cause a violation of the surface water quality standard established for a navigable water of the state.

c. A discharge shall not cause a pollutant to be present in an aquifer which impairs existing or reasonably foreseeable uses of water in an aquifer.

Numeric Aquifer Water Quality Standards (AAC R18-11-406)

a. The aquifer water quality standards in this section apply to aquifers that are classified for drinking water protected use.

b. The following are the aquifer water quality standards for inorganic chemicals:

Pollutant	(mg/L)
Arsenic	0.05
Asbestos	7 million fibers/liter (longer than 10 μm)
Barium	1.0
Cadmium	0.005
Chromium (Total)	0.1
Fluoride	4.0
Lead	0.05
Mercury	0.002
Nitrite (as N)	1.0
Nitrate (as N)	10.0
Total nitrate and nitrite (as N)	10.0
Selenium	0.05

c. The following are the aquifer water quality standards for organic chemicals:

Pollutant	(mg/L)
Benzene	0.005
Carbon tetrachloride	0.005
o-Dichlorobenzene	0.6
para-Dichlorobenzene	0.075
1,2-Dichloroethane (DCA)	0.005
1,1-Dichloroethylene (DCE)	0.007
cis-1,2-Dichloroethylene	0.07
trans-1,2-Dichlorethylene	0.1

Pollutant	(mg/L)
1,2-Dichloropropane	0.005
Ethylbenzene	0.7
Monochlorobenzene	0.1
Styrene	0.1
Tetrachloroethylene	0.005
Toluene	1.0
Trihalomethanes (total)	0.10
1,1,1-Trichloroethane	0.20
Trichlorethylene (TCE)	0.005
Vinyl Chloride	0.002
Xylenes (total)	10.0

d. The following are the aquifer water quality standards for pesticides and polychlorinated biphenyls (PCBs):

Pollutant	(mg/L)
Alachlor	0.002
Atrazine	0.003
Carbofuran	0.04
Chlordane	0.002
1,2-Dibromo-3-Chloropropane (DBCP)	0.0002
Ethylene Dibromide (EDB)	0.00005
Heptachlor	0.0004
Heptachlor Epoxide	0.0002
Endrin	0.0002
Lindane	0.0002
Methoxychlor	0.04
Polychlorinated Biphenols (PCBs)	0.0005
Toxaphene	0.003
2,4-Dichlorophenoxyacetic Acid (2,4-D)	0.07
2,4,5-Trichlorophenoxypropionic Acid (2,4,5-TP or Silvex)	0.05

e. The following are the aquifer water quality standards for radionuclides:

1. The maximum concentration for gross alpha particle activity, including Radium-226 but excluding radon and uranium, shall not exceed 15 pCi/l.

2. The maximum concentration of combined Radium-226 and Radium-228 shall not exceed 5 Pci/l.

3. The average annual concentration of beta particle and photon radioactivity from man-made radionuclides shall not produce an annual dose equivalent to the total body or any internal organ greater than 4 millirem/year.

4. Except for the radionuclides listed in this subsection, the concentration of man-made radionuclides causing 4 millirem total body or organ dose equivalents shall be calculated on the basis of a 2-liter-per-day drinking water intake using the 168-hour data listed in "Maximum Permissible Body Burdens and Maximum Permissible Concentration of Radionuclides in Air or Water for Occupational Exposure," National Bureau of Standards Handbook 69, National Bureau of Commerce, as amended August 1963 (and no future editions), incorporated herein by reference and on file with the Office of the Secretary of State and with the Department. If two or more radionuclides are present, the sum of their annual does equivalent to the total body or to any organ shall not exceed 4 millirem/year. The following average annual concentrations are assumed to produce a total body or organ dose of 4 millirems/year:

Radionuclide	Critical Organ	Pci/l
Tritium	Total Body	20,000
Strontium-90	Bone Marrow	8

f. The aquifer water quality standard for microbiological contaminants is based upon the presence or absence of total coliforms in a 100-milliliter sample. If a sample is total coliform-positive, a 400-milliliter repeat sample shall be taken within two weeks of the time the sample results are reported. Any total coliform-positive repeat sample following a total coliform-positive sample constitutes a violation of the aquifer water quality standard for microbiological contaminants.

g. The following are the aquifer water quality standards for turbidity:

1. One nephelometric turbidity unit as determined by a monthly average except that five or fewer nephelometric turbidity units may be allowed if it can be determined that the higher turbidity does not interfere with disinfection, prevent maintenance of effective disinfectant agents in water supply distribution systems, or interfere with microbiological determinations.

2. Five nephelometric turbidity units based on an average of two consecutive days.

Reference: ACC R18-11-406. Adopted effective January 4, 1990; amended effective August 14, 1992.

APPENDIX 3-10
GROUNDWATER SAMPLING RESULTS 1980-1992

PLANNING REGION GROUNDWATER BASIN	# of Wells Sampled	# of Samples Taken	# of Samples for ION	DET	EXC	# of Samples for MET	DET	EXC	# of Samples for NUT	DET	EXC	# of Samples for PEST	DET	EXC	# of Samples for RAD	DET	EXC	# of Samples for VOC	DET	EXC
Active Management Regions	4543	38216	295377	22502	1917	10414	3573	14	2638	2443	1320	100722	4086	1	226	0	0	32259	8748	187
Phoenix AMA	2218	10891	24378	17700	1577	8226	2948	13	2323	2187	1187	8927	4067	1	190			22268	7735	64
Pinal AMA	1011	7336	2150	1981	274	644	70		39	37	32	239	5		5			488	23	
Prescott AMA	402	4783	1282	1125	15	764	270	1	132	80	33	192			31			1020	99	3
Tucson AMA	912	15206	1727	1696	51	780	285		144	139	68	714	14					8483	891	120
Southeast Arizona Region	530	4773	1305	1204	116	1199	482	1	156	146	34	53	2	0	0	0	0	630	51	6
Aravaipa Canyon Basin	2	27	6	5		12	2													
Bonita Creek Basin																				
Cienega Creek Basin	113	508	167	144	3	108	26		22	17								30	27	
Donnelly Wash Basin																				
Douglas Basin	29	690	151	137	4	212	115		27	25	5	13	1					167	11	5
Dripping Spring Wash Basin																				
Duncan Valley Basin	71	433	152	148	30	48	28		8	8	1									
Lower San Pedro Basin	6	122	13	13		14	4		1	1	1	21						62	3	1
Morenci Basin																				
Safford Basin	134	924	285	274	66	208	77	1	16	16	3	8	1					2		
San Bernardino Valley Basin	2	12	3	3																
San Rafael Basin	21	73	26	23		12	2													
Upper San Pedro Basin	114	957	267	243	8	221	57		31	28	10	5						152	3	
Willcox Basin	38	1027	235	214	5	364	171		51	51	14	6						217	7	

LEGEND:

Water Quality Parameter Groups: ION = major anions/cations, MET = metals, NUT = nutrients (including nitrate), PEST = pesticides, PHY = physical parameters, RAD = radiochemicals, and VOC = volatile organic chemicals.
Abbreviations: DET (detection) = results are higher than the EPA detection limits, EXC (exceedance) = results exceed State and federal drinking water quality standards, MCLs or SMCLs, and AMA = Active Management Area.

SOURCE: Arizona Department of Environmental Quality, Arizona Water Quality Assessment 1992, State of Arizona Clean Water Act Section 305(b) Report.

APPENDIX 3-11
CONTAMINATION INFORMATION
A SUMMARY OF MAJOR SOIL/GROUNDWATER CONTAMINATED SITES AND REGULATORY ACTIONS

A SUMMARY OF MAJOR SOIL/GROUNDWATER CONTAMINATED SITES AND REGULATORY ACTIONS

SITE LOCATION AND NAME	CONTAMINATION PROBLEM	STATUS
Nogales-C.G. Conn LTD.	PCE, TCE, DCE, TCA, Chloroform, and vinyl chloride (VOCs) in groundwater.	RCRA-Quarterly monitoring.
Safford-Safford Airport	Soil contaminated with pesticides (malathion, parathion, methylparathion, DDT, lindane, and aldrin).	WQARF-Phase II investigation completed. Received and reviewing draft RAP.
Sahuarita-Eagle Picher Mill	Potential contamination of groundwater with heavy metals (lead and cadmium).	WQARF (vol.)-Voluntary cleanup completed. Consent decree in process.
St. David-Apache Powder	Nitrate contamination of groundwater and soil. Soil contaminated with heavy metals (chromium, lead and zinc). Abandoned drums of dinitrotoluene.	CERCLA-Investigation ongoing.

LEGEND:

CERCLA-Comprehensive Environmental Response, Compensation, and Liability Act; FFA-Federal Facilities Agreement; RAP-Remedial Action Plan; RCRA-Resource Conservation and Recovery Act; WQARF-Water Quality Assurance Revolving Fund; IRP - Installation Restoration Program.

SOURCE: ADEQ, Water Quality Assessment 1992, State of Arizona Clean Water Act Section 305(b) Report.