

Salt Watershed

Watershed Description

This watershed is composed of the Salt River drainage from its headwaters to Granite Reef Dam, excluding the Verde River drainage. This watershed can be divided into four very distinct sub-basins: White River, Black River, Tonto Creek, and the main stem Salt River.

The population of this 6,242 square mile watershed is approximately 40,500 people (2000 census), with most of this population in the Superior-Globe-Miami mining district. Land ownership is approximately: 49% Tribal, 48% federal, 2% private, and 1% state. The principal land uses are open range grazing, recreation, forestry, and mining. Nine wilderness areas have been set aside, which have restricted land uses and activities.

Elevations range from 10,600 feet (above sea level) in the White Mountains, to about 2,000 feet at Granite Reef Dam. The watershed above Roosevelt Lake (White River, Black River, and Tonto Creek) is above 5,000 feet elevation with high desert flora and fauna, and coldwater aquatic communities where perennial waters exist. The area below Roosevelt Lake is below 5,000 feet, and therefore, contains primarily warmwater aquatic communities.

Water Resources

This Watershed receives more precipitation than most of the state, with approximately 20 inches of rain and 20 inches of snowfall. Roosevelt Lake and a chain of other reservoirs (Apache, Canyon, and Saguaro) were constructed to store perennial flow from this watershed and provide much of the water used in the Phoenix metropolitan area.

An estimate of surface water resources in the Salt Watershed is provided in the following table. Waters on Tribal lands are not assessed by ADEQ; therefore, those statistics are shown separately.

Estimated Surface Water Resources in the Salt Watershed

	Perennial	Intermittent	Ephemeral
Stream miles	510	1,190	2,785
	Perennial	Non-perennial	
Lake acres	25,544	0	

Additional Surface Water Resources Locate on Tribal Lands - Not Assessed

	Perennial	Intermittent	Ephemeral
Stream miles On Tribal Lands	825	0	4,275
	Perennial	Non-perennial	
Lake acres On Tribal Lands	1,858	0	

Ambient monitoring focuses on perennial waters; however, special investigations may identify water quality problems on intermittent and even ephemeral waters. Estimated miles and acres are based on USGS digitized hydrology at 1:100,000 and have been rounded to the nearest 5 miles or 5 acres.

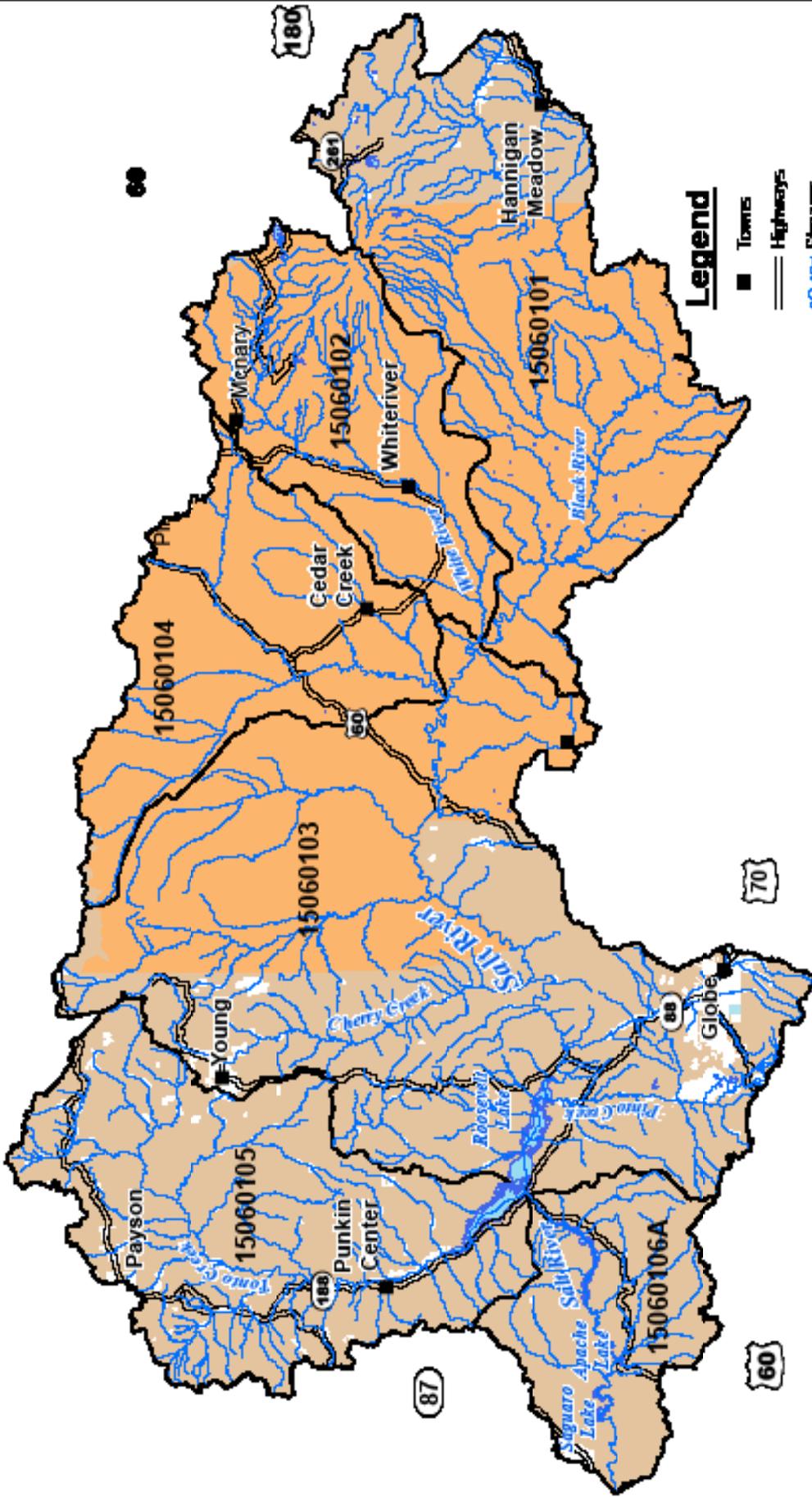
Assessments

The Salt Watershed can be separated into the following drainage areas (subwatersheds):

15060101	Black River
15060102	White River (Tribal land - Not assessed)
15060103	Upper Salt River
15060104	Carrizo Creek (Tribal land - Not assessed)
15060105	Tonto Creek
15060106A	Lower Salt River

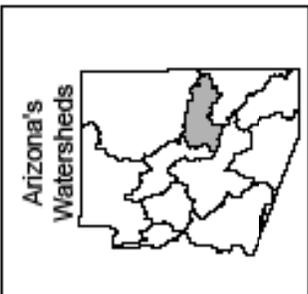
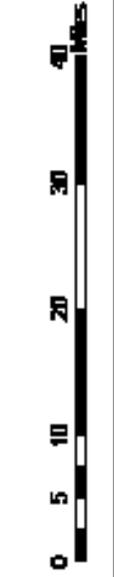
These drainage areas and the surface waters assessed as "attaining" or "impaired" are illustrated on the following watershed map. Methods used to complete these assessments are described in the "Surface Water Assessment Methods and Technical Support" document.

Salt River Watershed

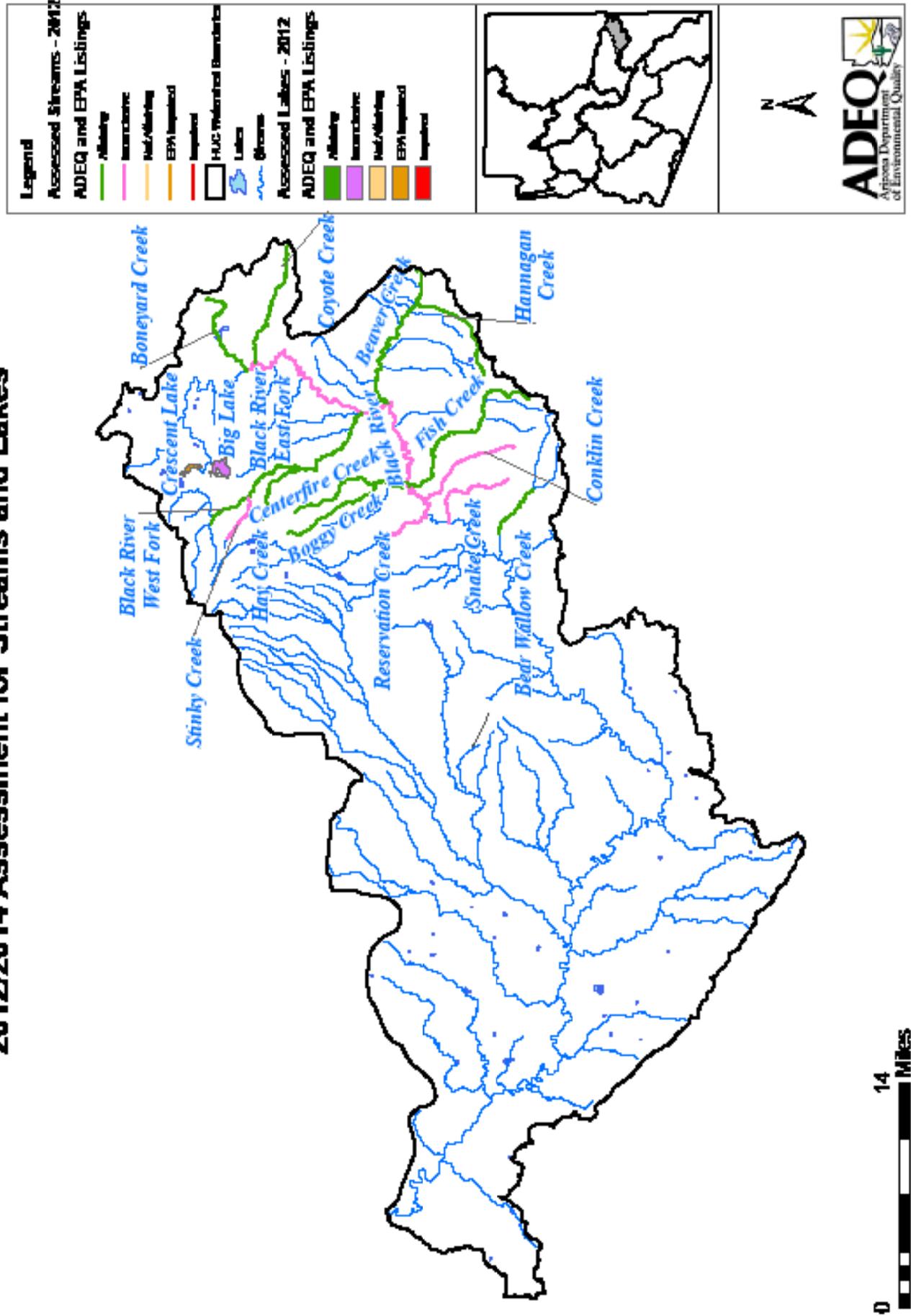


Legend

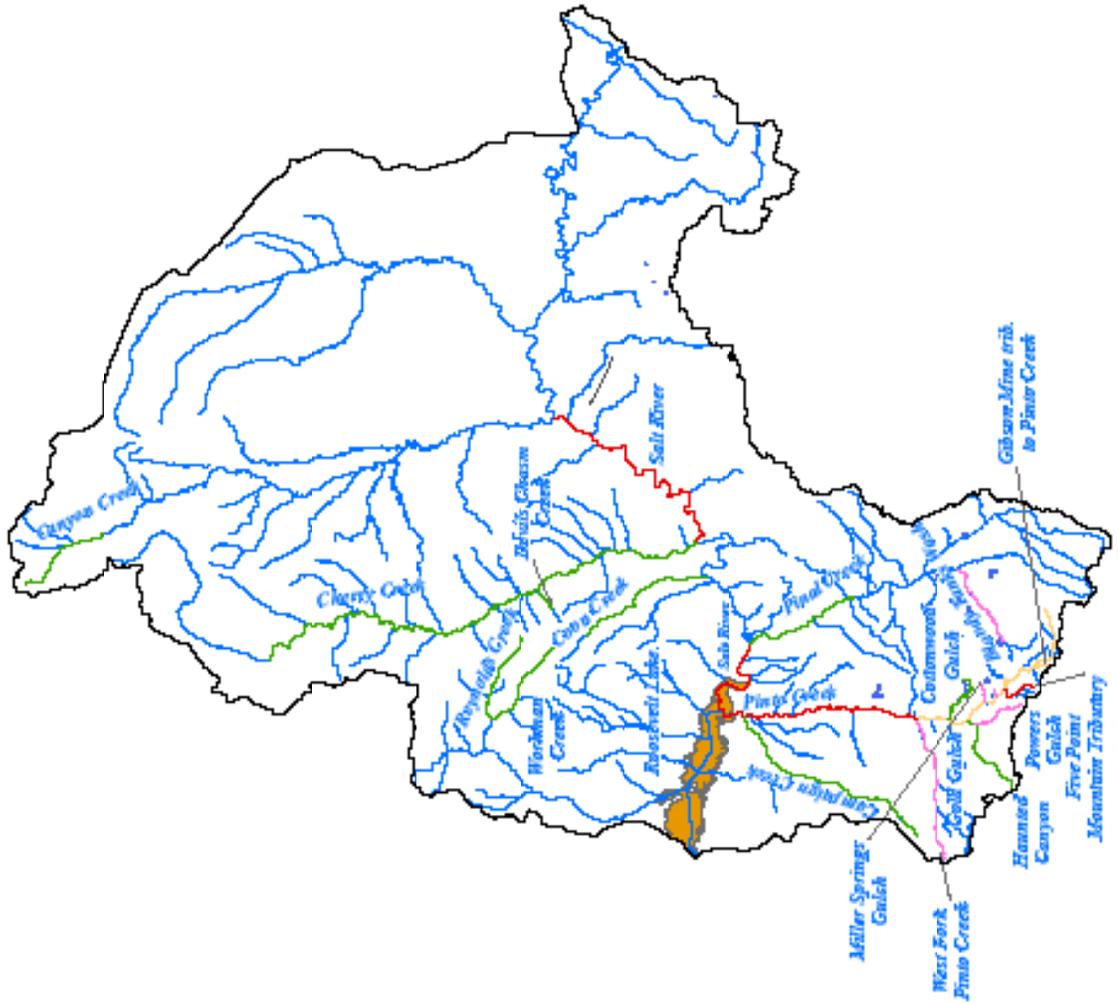
- Towns
 - == Highways
 - ~ Streams
 - ☪ Lakes
 - HUG Watershed Boundaries
- Land Ownership**
- Federal
 - Private
 - State/County/Municipal
 - Tribal



Salt Watershed HUC 15060101 2012/2014 Assessment for Streams and Lakes



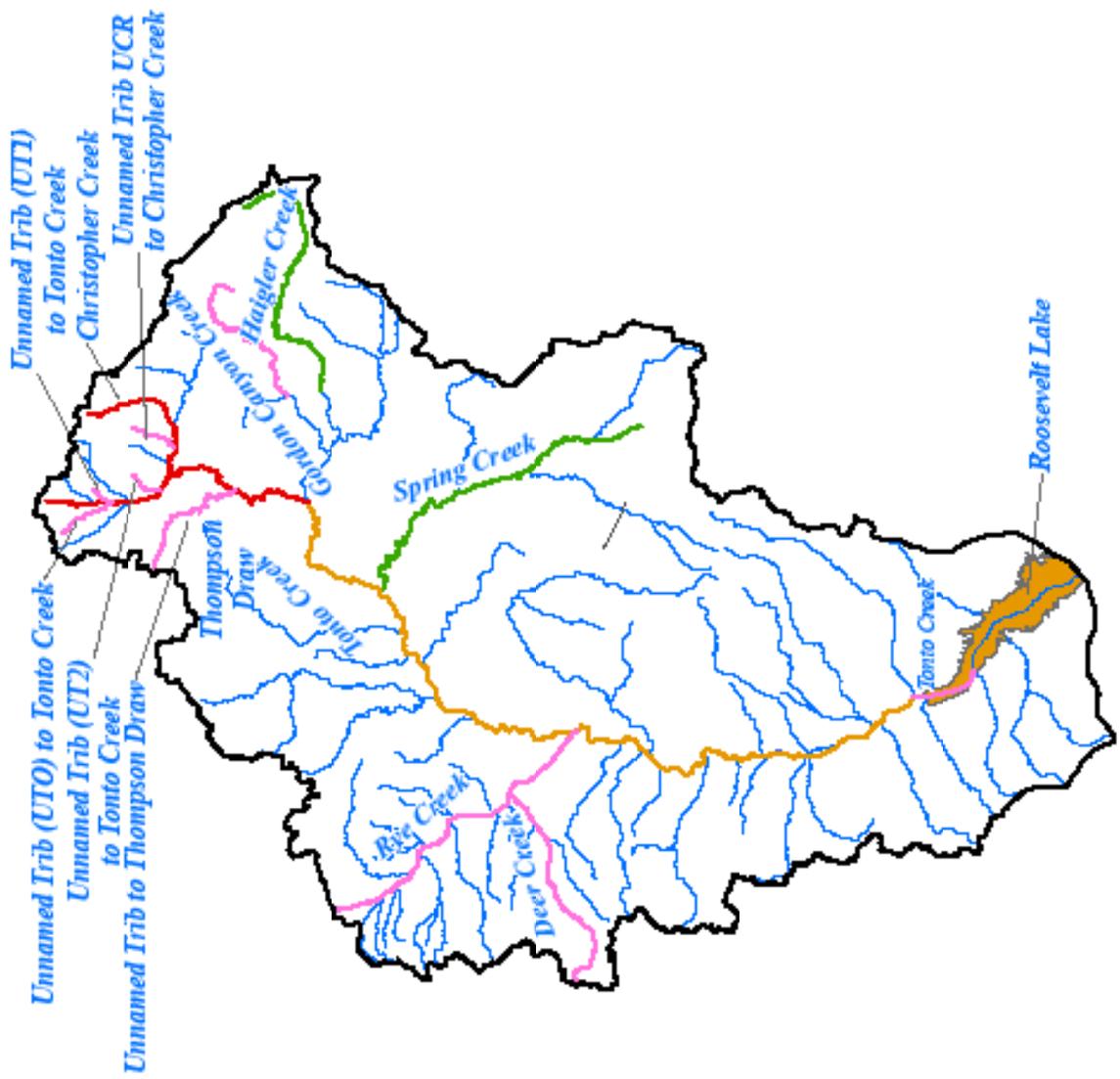
Salt Watershed HUC 15060103 2012/2014 Assessment for Streams and Lakes



Legend	Assessed Streams - 2012	Assessed Lakes - 2012
ADEQ and EPA Listings	ADEQ and EPA Listings	ADEQ and EPA Listings
<ul style="list-style-type: none"> Assessed Impaired Not Assessed Not Impaired 	<ul style="list-style-type: none"> Assessed Impaired Not Assessed Not Impaired 	<ul style="list-style-type: none"> Assessed Impaired Not Assessed Not Impaired
<ul style="list-style-type: none"> HUC Watershed Boundary Lakes Streams 		



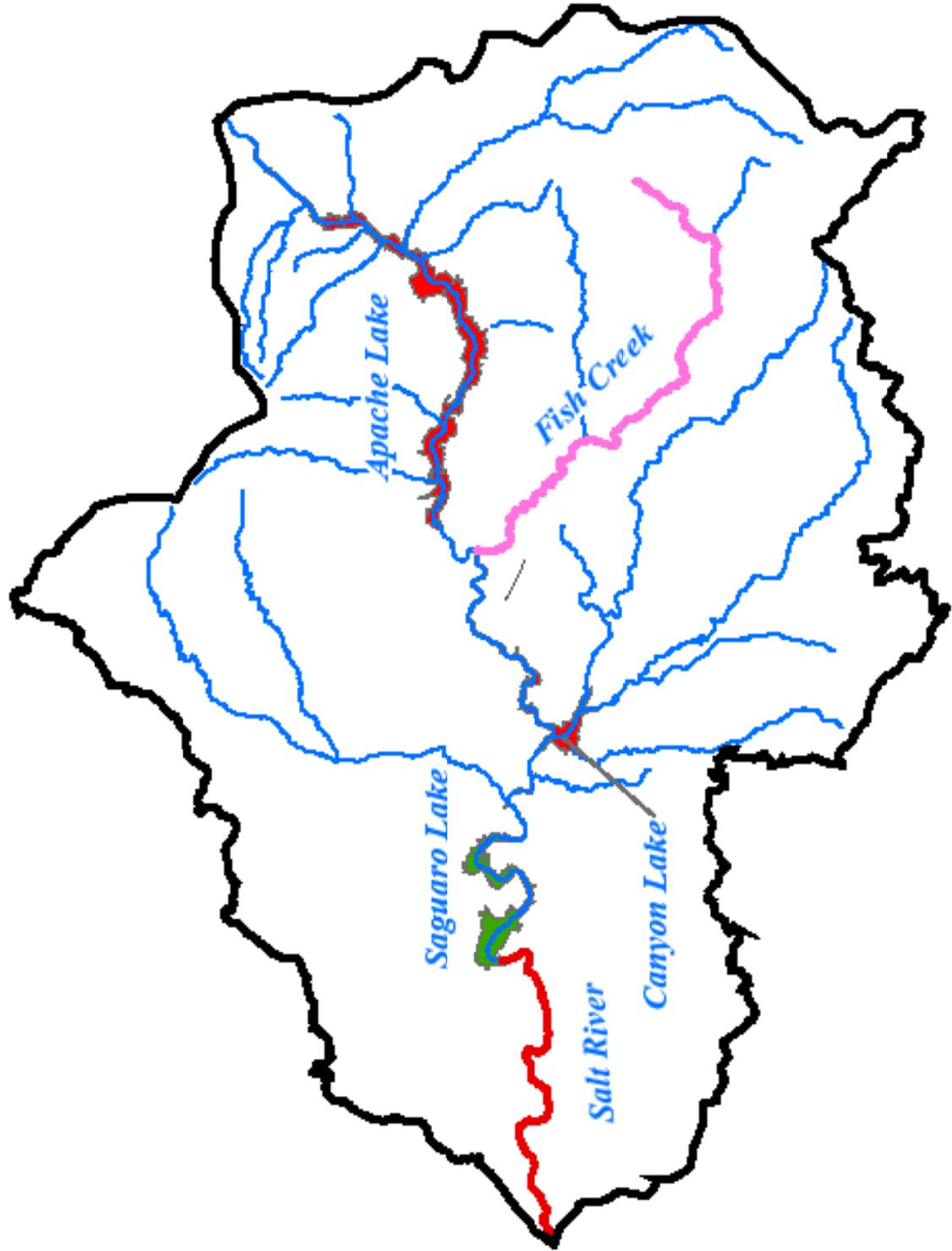

Salt Watershed HUC 15060105 2012/2014 Assessment for Streams and Lakes



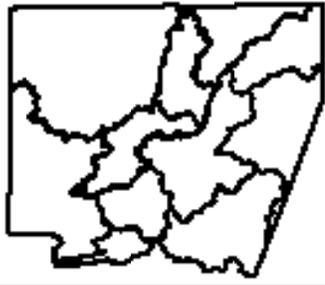
Legend	Assessed Streams - 2012	Assessed Lakes - 2012
ADEQ and EPA Listings	ADEQ and EPA Listings	ADEQ and EPA Listings
<ul style="list-style-type: none"> Assessed Not Assessed EPA Impaired Impaired 	<ul style="list-style-type: none"> Assessed Not Assessed EPA Impaired Impaired 	<ul style="list-style-type: none"> HUC Watershed Boundary Lakes Streams




**Salt Watershed
HUC 15060106A
2012/2014 Assessment for Streams and Lakes**



Legend	Assessed Streams - 2012	Assessed Lakes - 2012
ADEQ and EPA Listings	ADEQ and EPA Listings	ADEQ and EPA Listings
Assessed	Assessed	Assessed
Not Assessed	Not Assessed	Not Assessed
EPA Impaired	EPA Impaired	EPA Impaired
Impaired	Impaired	Impaired
HUC Watershed Boundary	HUC Watershed Boundary	HUC Watershed Boundary
Lakes	Lakes	Lakes
Streams	Streams	Streams
Assessed Lakes - 2012	Assessed Lakes - 2012	Assessed Lakes - 2012
ADEQ and EPA Listings	ADEQ and EPA Listings	ADEQ and EPA Listings
Assessed	Assessed	Assessed
Not Assessed	Not Assessed	Not Assessed
EPA Impaired	EPA Impaired	EPA Impaired
Impaired	Impaired	Impaired



IMPACT STATEMENT

Low dissolved oxygen (2006/8)

DWS - Inconclusive • FC - Attaining • FBC - Inconclusive
 AGI - Inconclusive • AGL - Inconclusive • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Arsenic	10 ug/L	9/23/2008	12 ug/L	DWS is inconclusive with 1 exceedance in 7 samples (binomial).
Beryllium	4 ug/L	2/19/2009	64 ug/L	DWS is inconclusive with 1 exceedance in 7 samples (binomial).
Cadmium ^d	3.5 ug/L ^{chronic} @ 185 mg/L hardness	1/23/2008	6.1 ug/L	A&Ww is inconclusive with 1 exceedance in 7 samples.
Copper ^d	20.7 ug/L ^{acute} , 13.2 ug/L ^{chronic} @ 158 mg/L hardness	5/6/2009	30 ug/L	A&Ww is inconclusive with 1 exceedance.
Dissolved oxygen	6.0 mg/L	7/22/2008	3.42 mg/L	A&Ww is remains impaired with 3 exceedances in 12 samples (binomial).
		12/12/2007	5.69 mg/L	
		2/19/2009	2.36 mg/L	
Lead ^d	4.0 ug/L @ 154 mg/L hardness	7/22/2008	6 ug/L	A&Ww is inconclusive with 1 exceedance in 7 samples.
Nitrogen	1.0 mg/L, SSM 0.3 mg/L, Annual Mean	1/23/2008	4.7 mg/L	A&Ww & FBC are inconclusive with 3 exceedances in 15 samples (binomial). No annual average exceedances (2nd aggregation function and time frame for calculating average changed from 2010).
		5/8/2008	1.04 mg/L	
		7/22/2008	1.06 mg/L	
Phosphorus	0.06 mg/L, SSM 0.03 mg/L, Annual Mean	11/2/2006	0.08 mg/L	A&Ww and FBC are inconclusive with 5 exceedances in 19 samples (2nd aggregation function changed since last assessment). 2 numeric annual mean exceedances but none were composites at 1,2, & 5 meters as required.
		2/14/2008	0.062 mg/L	
		7/22/2008	0.11 mg/L	
		9/23/2008	0.09 mg/L	
		5/6/2009	0.16 mg/L	
		7/07-6/08	0.038 mg/L	
		7/08-6/09	0.031 mg/L	
Manganese	10000 ug/L AGI 980 ug/L DWS	7/22/2008	20000 ug/L	AGI and DWS are inconclusive with 1 exceedance in 7 samples (binomial).
pH	9.0 SU	7/22/2008	9.5 SU	AGI, AGL, A&Ww, DWS, and FBC are inconclusive with 1 exceedance in 8 samples (binomial).

Monitoring Summary

Sampling period: 11/2/2006 - 5/6/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
At Marina	SRAPA-MAR	100998	ADEQ	CLP
At Dam	SRAPA-A	100997	ADEQ	CLP
At Riverine Zone	SRAPA-C	101706	UA	CLP
Open Water Northwest From Resort	SRAPA-NLS	105780	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(18-21) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(3-23) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(18-22) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Manganese, pH, copper (dissolved), lead (dissolved), arsenic, beryllium, cadmium (dissolved), dissolved oxygen, nitrogen, phosphorus
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect manganese, arsenic, beryllium, dissolved copper, dissolved lead, and pH samples due to exceedances. Collect <i>E. coli</i> to reflect 3 seasons over assessment period to complete core parameter coverage.

Impairment Discussion
Remains impaired for low dissolved oxygen.

BEAR WALLOW CREEK

N. and S. Forks Bear Wallow - Indian Res.
15060101-023A
5.9 Miles

Category 1

Attaining all uses

FC - Attaining • FBC - Attaining • AGL - Attaining
A&Wc - Attaining

No Exceedances**M**onitoring Summary

Sampling period: 8/1/2007 - 5/4/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW SOUTH FORK BEAR WALLOW CREEK	SRBWL005.79	101198	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(5) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), selenium, mercury (dissolved)

Priority	Monitoring Recommendations
Low	Use lower lab reporting limits for dissolved metals, especially cadmium and copper. Good core parameter coverage with small number of samples.

FC - Attaining • FBC - Attaining • AGI - Attaining
 AGL - Attaining • A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	6/18/2008	6.5 mg/L	A&Wc is inconclusive with 1 exceedance in 7 samples.
SSC	25 mg/L	7/31/2007	49 mg/L	A&Wc is attaining with no median exceedances.

Monitoring Summary

Sampling period: 7/31/2007 - 10/22/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FOREST ROAD 26 BRIDGE	SRBEV007.28	102135	ADEQ	Ambient
AT USGS GAGE NEAR SPRUCEDALE, AZ	SRBEV001.40	100373	ADEQ	Ambient
BELOW HANNAGAN CREEK	SRBEV009.56	102139	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(11) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(9-11) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(8-12) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	None
Missing Seasonal Distribution	Copper (dissolved)
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), zinc (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect dissolved oxygen samples due to the exceedance.

DWS - Inconclusive • FC - Inconclusive • FBC - Inconclusive
AGI - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary
Sampling period: 10/29/2010 - 5/11/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
At Dam	SRBIG-A	101322	ADEQ	CLP, TMDL
Mid Lake	SRBIG-B	101355	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(3-4) Arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , nitrite/nitrate, arsenic, chromium, lead, boron, manganese, copper, fluoride
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

BLACK RIVER

Beaver Creek - Reservation Creek
15060101-007
13.1 Miles

Category 3
Inconclusive

DWS - Inconclusive • FC - Inconclusive • FBC - Inconclusive
AGI - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances**M**onitoring Summary

Sampling period: 7/10/2008 - 7/10/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FOREST ROAD #25	SRBLR102.24	101202	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , nitrite/nitrate, fluoride, arsenic, chromium, lead, boron, manganese, copper
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , nitrite/nitrate, fluoride, arsenic, chromium, lead, boron, manganese, copper
Lab Detection Limits Not Low Enough	Cadmium (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

BLACK RIVER EAST FORK

Headwaters - Black River
15060101-009
26.7 Miles

Category 3
Inconclusive

Salt

DWS - Inconclusive • FC - Inconclusive • FBC - Inconclusive
AGI - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 8/31/2010 - 4/20/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE DIAMOND ROCK CAMPGROUND	SREFB008.27	100539	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , nitrite/nitrate, fluoride, arsenic, chromium, lead, boron, manganese, copper
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

BLACK RIVER WEST FORK

Indian Reservation Boundary - Black River
15060101-048
14.6 Miles

Category 2

Attaining some uses

DWS - Attaining • FC - Attaining • FBC - Attaining
AGI - Attaining • AGL - Attaining • A&Wc - Inconclusive

No Exceedances**M**onitoring Summary

Sampling period: 7/31/2007 - 10/22/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE WEST FORK CAMPGROUND	SRWFB005.34	100691	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Copper (dissolved)
Missing Seasonal Distribution	Copper (dissolved)
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium, copper, and zinc. Collect dissolved copper samples to reflect 3 seasons over assessment period to complete core parameter coverage.

B LOODY TANKS WASH

Schultze Ranch - Miami Wash
15060103-034B
6.645 Miles

Category 3
Inconclusive

Salt

PBC - Inconclusive • A&We - Inconclusive

Use Support

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	14.8 ug/L ^{acute} @ 62 mg/L hardness	2/5/2008	46 ug/L	A&We is inconclusive with 1 exceedance in 1 sample.

Monitoring Summary

Sampling period: 2/5/2008 - 2/5/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT FOREST AVENUE	SRBTW003.16	105999	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(0) None	(1) pH, SSC

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved)
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Not enough data to assess. Collect more dissolved copper samples due to the exceedance. All core parameters in need of sample number and seasonal distribution coverage.

BOGGY CREEK (BGY)

Headwaters - Centerfire Creek
15060101-361
7.1 Miles

Category 1

Attaining all uses

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

No Exceedances**M**onitoring Summary

Sampling period: 7/27/2010 - 4/20/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW FOREST SERVICE ROAD 25	SRBGY002.86	108402	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium, copper, and zinc.

BONEYARD CREEK

Headwaters - East Fork Black
15060101-305
7.6 Miles

Category 1
Attaining all uses

Salt

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 8/1/2007 - 10/22/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE CLABBER CITY	SRBON001.69	102125	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium and copper. Good core parameter coverage with small number of samples.

CAMPAIGN CREEK

Headwaters - Pinto Creek
15060103-037
16.579 Miles

Category 2

Attaining some uses

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	8/29/2007	5.04 mg/L	A&Ww is inconclusive with 1 exceedance in 4 samples.
SSC	80 mg/L	8/29/2007	248 mg/L	A&Ww is attaining with no median exceedances.

Monitoring Summary

Sampling period: 8/29/2007 - 11/18/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT SUPERSTITION WIL- DERNESS BOUNDARY	SRCGN009.78	100431	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect dissolved oxygen samples due to the exceedance. Collect <i>E. coli</i> to represent at least 3 seasons during an assessment period.

CANYON CREEK

Headwaters - White Mtn. Apache
15060103-014
8.6 Miles

Category 1
Attaining all uses

Salt

DWS - Attaining • FC - Attaining • FBC - Attaining
AGI - Attaining • AGL - Attaining • A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 9/18/2007 - 5/10/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE VALENTINE CANYON	SRCYN045.73	100528	ADEQ	Ambient
BELOW FISH HATCHERY	SRCYN048.21	108442	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4-8) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(7) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-8) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), nickel (dissolved), selenium, zinc (dissolved)

Priority	Monitoring Recommendations
Low	Use lower lab reporting limits for dissolved metals, especially cadmium, copper, and zinc. Good core parameter coverage with few samples.

IMPACT

Low dissolved oxygen (2004)

DWS - Inconclusive • FC - Attaining • FBC - Inconclusive
 AGI - Attaining • AGL - Attaining • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	9/27/2006	0.69 mg/L	A&Ww remain impaired with 4 exceedances in 15 samples (binomial).
		10/25/2006	2.58 mg/L	
		7/11/2007	5.5 mg/L	
		6/26/2008	4.5 mg/L	
Manganese	980 µg/L	9/30/2008	10000 µg/L	DWS is inconclusive with 1 exceedance in 8 samples (binomial).
pH	9.0 SU	6/26/2008	9.7 SU	AGI, AGL, A&Ww, DWS, and FBC are attaining with 2 exceedances in 16 samples (binomial).
		7/30/2008	9.5 SU	
Nitrogen	1.0 mg/L, SSM 0.3 mg/L, Annual mean	2/25/2008	3.4 mg/L	A&Ww & FBC are inconclusive with 4 exceedances in 16 samples (SSM, binomial) and 1 numeric annual mean exceedance.
		3/20/2008	4.0 mg/L	
		4/14/2008	2.2 mg/L	
		7/30/2008	1.03 mg/L	
		07/06-06/0	0.48 mg/L	
Phosphorus	0.06 mg/L, SSM 0.03 mg/L, Annual mean	9/27/2006	0.09 mg/L	A&Ww & FBC are inconclusive with 8 exceedances in 15 samples (SSM, binomial) and 3 numeric annual mean exceedances (they were not composites at 1,2, & 5 meters as required).
		10/25/2006	0.068 mg/L	
		7/11/2007	0.3 mg/L	
		2/25/2008	0.134 mg/L	
		3/20/2008	0.11 mg/L	
		4/15/2008	0.08 mg/L	
		9/30/2008	0.061 mg/L	
		5/11/2009	0.51 mg/L	
		7/06-6/07	0.06 mg/L	
		7/07-6/08	0.05 mg/L	
		7/08-6/09	0.04 mg/L	

Monitoring Summary

Sampling period: 9/27/2006 - 5/11/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT INLET	SRCAN-C1	102615	UA	CLP
IN TRANSITIONAL ZONE	SRCAN-B	101699	ADEQ	CLP
AT MARINA	SRCAN-MAR	101701	UA	CLP
AT STEEP CLIFFS	SRCAN-STE	105719	ADEQ	CLP
ACROSS FROM RESTAURANT LOUNGE	SRCAN-RL	105720	ADEQ	Ambient
DAM SITE IN LITTORAL ZONE	SRCAN-A	101697	ADEQ	CLP
UPPER MIDDLE	SRCAN-MID	102837	AGFD	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(17-25) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(3-36) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphate, phosphorus, total Kjeldahl nitrogen	(2-36) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Manganese, dissolved oxygen, phosphorus, nitrogen
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Copper (dissolved), lead (dissolved), mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more manganese samples due to the exceedance. <i>E. coli</i> needs sample/seasonal coverage.

Impairment Discussion
Remains impaired for low dissolved oxygen.

CENTERFIRE CREEK

Headwaters - Black River
15060101-356
8.7 Miles

Category 1

Attaining all uses

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

No Exceedances**M**onitoring Summary

Sampling period: 7/27/2010 - 4/20/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FS RD #25	SRCTF004.17	103185	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium, copper, and zinc.

C HERRY CREEK

Tributary at 340509 / 110560 - Salt River
15060103-015B
40.9 Miles

Category 1

Attaining all uses

Salt

FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Ww - Attaining

No Exceedances

Monitoring Summary

Sampling period: 10/4/2007 - 5/23/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE DEVILS CHASM	SRCHE013.65	100442	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(8) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(7-8) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-8) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Good core parameter coverage with few samples.

CHRISTOPHER CREEK

Headwaters - Tonto Creek
15060105-353
8.0 Miles

Category 4A/5

Not attaining/Impaired

Phosphorus (2006/8) and E. coli (2004)

FC - Inconclusive • FBC - Not Attaining • AGI - Inconclusive
AGL - Inconclusive • A&Wc - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	5/27/2008	6.77 mg/L	A&Wc is inconclusive with 4 exceedances in 17 samples (binomial).
		8/13/2009	6.71 mg/L	
		8/24/2010	6.21 mg/L	
		9/8/2010	6.02 mg/L	
E. coli	235 cfu/100 mL, SSM	9/3/2008	365 cfu/100 mL	FBC remains not attaining with 4 exceedances in 16 samples.
		8/14/2009	517 cfu/100 mL	
		9/30/2009	285 cfu/100 mL	
		7/12/2010	3629 cfu/100 mL	
Phosphorus	0.1 mg/L, Annual mean	7/12/2010	0.161 mg/L	A&Wc and FBC remain impaired with 1 annual mean exceedance.

Monitoring Summary

Sampling period: 10/11/2006 - 6/30/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW CHRISTOPHER CREEK CAMPGROUND	SRCRS002.25	100365	ADEQ	TMDL
ABOVE TONTO CREEK AND BELOW BOX CANYON	SRCRS000.08	101034	ADEQ	TMDL
AT TOP OF BOX CANYON	SRCRS001.24	101033	ADEQ	TMDL
ABOVE RECREATION AREA	SRCRS006.20	101027	ADEQ	TMDL
ABOVE R-BAR-C SCOUT RANCH	SRCRS001.74	106060	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(44-60) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(6-64) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	Zinc (dissolved), cadmium (dissolved), copper (dissolved), boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), cadmium (dissolved), copper (dissolved), boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
High	Collect more dissolved oxygen samples due to exceedances. Collect more samples in support of TMDL development and effectiveness monitoring.

Impairment Discussion
Not attaining for <i>E. coli</i> with TMDL approved in 2005. Remains impaired for phosphorus (2006/8). New data for this assessment shows exceedances in all the same parameters.

CONKLIN CREEK

Headwaters - Black River
15060101-026
7.4 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/2/2010 - 5/5/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FOREST ROAD #25	SRCKN001.61	100521	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, (3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen, copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

COON CREEK (COO)

Tributary at 334642 / 110542 -- Salt River
15060103-039B
10.1 Miles

Category 2

Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 10/4/2007 - 6/18/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT FOREST ROAD #203	SRC00001.92	100379	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Nitrogen
Missing Seasonal Distribution	Nitrogen, phosphorus, <i>E. coli</i>
Lab Detection Limits Not Low Enough	Mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect <i>E. coli</i> , nitrogen and phosphorus to represent at least 3 seasons during an assessment period.

COTTONWOOD GULCH

Headwaters - Pinto Creek
15060103-891
1.9 Miles

Category 3
Inconclusive

PBC - Inconclusive • A&We - Inconclusive

Use Support

No Exceedances

Monitoring Summary

Sampling period: 7/11/2006 - 4/7/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW OUTFALL PV004	SRCTG000.39	103443	BHP	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(4-5) Arsenic, beryllium, cadmium, copper, manganese, selenium, zinc	(0) None	(2) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Dissolved oxygen, pH, nitrogen, phosphorus
Missing Seasonal Distribution	Dissolved oxygen, pH, nitrogen, phosphorus
Lab Detection Limits Not Low Enough	Selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

COYOTE CREEK (COY)

Headwaters - East Fork Black River
15060101-027
8.9 Miles

Category 2
Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 mL, SSM	7/30/2010	980 cfu/100 mL	FBC is inconclusive with 1 exceedance in 3 samples. Note: This exceedance was storm-related.

Monitoring Summary

Sampling period: 7/30/2010 - 4/19/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE FOREST SERVICE ROAD 276	SRCOY003.95	108403	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	<i>E. coli</i>
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect more <i>E. coli</i> samples due to the exceedance.

CRESCENT LAKE

15060101-0420
156.7 Acres

Category 5
Impaired

High pH (2002 EPA)

IMPAIRMENT STATUS

FC - Inconclusive • FBC - Impaired • AGI - Impaired
AGL - Impaired • A&Wc - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Nitrogen	2 mg/L, SSM	8/7/2008	2.02 mg/L	A&Wc and FBC are inconclusive with 1 single sample maximum exceedance in 7 samples (binomial).
pH	9.0 SU	8/7/2008	9.4 SU	A&Wc, FBC, AGL and AGI remain impaired with 1 exceedance in 7 samples (binomial).
Dissolved Oxygen	7.0 mg/L	8/5/2010	6.51 mg/L	A&Wc is inconclusive with 1 exceedance in 6 samples (binomial).

Monitoring Summary

Sampling period: 11/18/2009 - 5/11/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
MID LAKE	SRCRE-B	100993	ADEQ	CLP
AT BOAT RAMP	SRCRE-BR	101320	ADEQ	SPS, CLP
AT DAM	SRCRE-A	108762	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(5) Boron, copper, lead, manganese, mercury, selenium	(1-7) Ammonia, nitrate, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-7) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Nitrogen, dissolved oxygen
Missing Core Parameters	
Missing Seasonal Distribution	Zinc (dissolved), nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect more pH, dissolved oxygen and nitrogen samples due to exceedances.

Impairment Discussion
EPA overfiled for pH in 2002.

DEER CREEK (D4E)

Headwater - Rye Creek
15060105-018
11.9 Miles

Category 3

Inconclusive

FC - Inconclusive • FBC - Inconclusive • A&Wc - Inconclusive

Use Support

No Exceedances**M**onitoring Summary

Sampling period: 3/14/2011 - 3/14/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW HIGHWAY 87	SRD4E001.72	108682	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), lead (dissolved)

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

DEVILS CHASM CREEK

Tributary at 334846 / 110523
15060103-801B
1.6 Miles

Category 2

Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	27.8 µg/L ^{acute} @ 240 mg/L hardness	9/21/2010	90 µg/L	A&Ww acute is inconclusive with 1 exceedance in 4 samples.
Nitrogen	0.6 mg/L, Annual mean	9/21/2010	0.64 mg/L	A&Ww and FBC are inconclusive with 1 annual mean exceedance.

Monitoring Summary

Sampling period: 9/21/2010 - 6/1/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE CHERRY CREEK	SRDEV000.38	100533	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4-5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved), nitrogen
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Beryllium, mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect dissolved copper and total nitrogen samples due to exceedances.

FISH CREEK-LOWER SALT RIVER

Headwaters - Salt River
15060106A-583
16.3 Miles

Category 3

Inconclusive

FC - Inconclusive • FBC - Inconclusive • A&Ww - Inconclusive

Use Support

No Exceedances**M**onitoring Summary

Sampling period: 3/12/2009 - 4/21/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
0.25 MILES ABOVE HIGHWAY 88	SRFSH006.38	100552	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1-2) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Mercury (dissolved)

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

FISH CREEK-UPPER SALT RIVER

Headwaters - Black River
15060101-032
13.8 Miles

Category 2

Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Wc - Attaining

No Exceedances

Monitoring Summary

Sampling period: 7/31/2007 - 6/24/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NEAR BEAR WALLOW WILDERNESS	SRFIS004.49	100553	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), zinc (dissolved), selenium

Priority	Monitoring Recommendations
Low	<i>E. coli</i> needs sample/seasonal coverage.

Five Point Mountain TributaryHeadwaters - Pinto Creek
15060103-885
2.9 Miles**Category 5**
Impaired**Dissolved Copper (2006/8)**

PBC - Inconclusive • A&We - Impaired

No Exceedances**M**onitoring Summary
Sampling period: no samples

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
60W3	SRFPM002.24	102657	ADEQ	TMDL

Metals Samples	Nutrients & Related Samples	Other Samples
none	none	none

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	All core parameters
Missing Seasonal Distribution	All core parameters
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Need more data. All core parameters need seasonal coverage.

Impairment Discussion
Remains impaired for dissolved copper (2006/8).

Copper (2006/8)
 IMPAIRMENT STATUS
 FC - Inconclusive • FBC - Inconclusive
 A&Ww - Not Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper	1300 ug/L	8/7/2007	2300 ug/L	FBC is inconclusive with 4 exceedances in 4 samples (binomial).
		12/1/2007	6400 ug/L	
		12/11/2007	3900 ug/L	
		1/28/2008	4900 ug/L	
Copper ^d	14.7 ug/L ^{acute} , 9.7 ug/L ^{chronic} @ 110 mg/L hardness	8/7/2007	2200 ug/L	A&Ww remains not attaining with 3 exceedances in 3 samples.
	11.5 ug/L ^{acute} , 7.8 ug/L ^{chronic} @ 85 mg/L hardness	12/1/2007	3800 ug/L	
	7.3 ug/L ^{acute} , 5.1 ug/L ^{chronic} @ 52 mg/L hardness	12/11/2007	3500 ug/L	
pH	6.5 SU	12/11/2007	6.1 SU	A&Ww and FBC are inconclusive with 1 exceedance in 4 samples (binomial).

Monitoring Summary
 Sampling period: 8/7/2007 - 1/28/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT PINTO CREEK	SRGIB000.11	101071	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, silver, thallium, zinc, selenium	(1) Nitrate, nitrite, nitrite/nitrate	(1-4) pH, SSC

Salt Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	pH, copper
Missing Core Parameters	Dissolved oxygen, pH, nitrogen, phosphorus, <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Copper (dissolved), lead (dissolved), nickel (dissolved), silver (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Need more samples to determine attainment status. All core parameters need coverage.

Impairment Discussion
Remains not attaining for dissolved copper. Pinto Creek copper TMDL completed in 2001.

PBC - Attaining • A&We - Inconclusive

Use Support

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	85.9 ug/L @ 400 mg/L hardness	4/7/2008	110 ug/L	A&We is attaining. No acute exceedances during the last 3 years of monitoring.

Monitoring Summary

Sampling period: 7/9/2006 - 10/14/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT WEIR	SRGDG000.03	102666	BHP	Permit Monitoring
NORTH OF #3 TAILING IMPOUNDMENT	SRGDG000.21	103442	BHP	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(7-9) Arsenic, beryllium, cadmium, copper, manganese, selenium, zinc	(1) Nitrite/nitrate	(4) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Nitrogen, phosphorus
Missing Seasonal Distribution	Nitrogen, phosphorus
Lab Detection Limits Not Low Enough	Selenium

Priority	Monitoring Recommendations
Medium	Collect nitrogen and phosphorus samples to represent at least 3 seasons during an assessment period.

GORDON CANYON CREEK

Headwaters - Hog Canyon
15060105-336A
12.7 Miles

Category 3

Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances**M**onitoring Summary

Sampling period: 11/10/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ALONG COLCORD ROAD, NEAR YOUNG, AZ	SRGOD012.05	100377	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

H AIGLER CREEK

Headwaters - Trib at 341223 / 1110011
15060105-012A
15.4 Miles

Category 2
Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/18/2007 - 10/21/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NEAR FISHERMANS POINT ON FR200	SRHAG013.09	105442	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), nitrogen, phosphorus, cadmium (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

HANNAGAN CREEK

Headwaters - Beaver Creek
15060101-034
7.2 Miles

Category 2

Attaining some uses

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Wc - Attaining

No Exceedances**M**onitoring Summary

Sampling period: 7/30/2007 - 6/24/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT HIGHWAY 191, NEAR ALPINE, AZ	SRHAN002.27	102149	ADEQ	Ambient
ABOVE BEAVER CREEK	SRHAN000.06	102141	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(7) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(7) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-7) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

HAUNTED CANYON

Headwaters - Pinto Creek
15060103-879
6.8 Miles

Category 2

Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Nitrogen	2.0 mg/L, SSM	12/17/2007	2.76 mg/L	A&Ww and FBC are inconclusive with 1 exceedance in 2 samples (binomial).

Monitoring Summary

Sampling period: 8/28/2007 - 4/30/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
CARLOTA WEIR	SRHNC000.14	101072	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-3) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Nitrogen
Missing Core Parameters	Dissolved oxygen, nitrogen, phosphorus, copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Dissolved oxygen, nitrogen, phosphorus, copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect nitrogen samples to ascertain A&W attainment. Collect D.O., N, P, copper and <i>ecoli</i> samples to represent three seasons in assessment period to complete core parameter coverage.

HAY CREEK

Headwater - West Fork Black River
15060101-353
4.5 Miles

Category 1

Attaining all uses

FC - Attaining • FBC - Attaining • AGL - Attaining
A&Wc - Attaining

No Exceedances**M**onitoring Summary

Sampling period: 7/31/2007 - 6/17/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE WEST FORK BLACK RIVER	SRHAY000.04	101299	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Use lower reporting limits for dissolved metals, especially cadmium, copper, and zinc.

MILLER SPRINGS GULCH

Headwaters - Pinto Creek
15060103-892
1.6 Miles

Category 3
Inconclusive

Salt

PBC - Inconclusive • A&We - Inconclusive

Use Support

No Exceedances

Monitoring Summary

Sampling period: 7/11/2006 - 10/3/2006

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
HEADWATERS TO PINTO CREEK	SRMSG22.83	104979	BHP	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(2) Arsenic, beryllium, cadmium, copper, manganese, selenium, zinc	(0) None	(2) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

PINAL CREEK

Lower Pinal Creek WTP discharge -- Salt River
15060103-280D
6.4 Miles

Category 2
Attaining some uses

FC - Attaining • FBC - Attaining • AGL - Attaining
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
pH	6.5 SU	3/6/2007	6.03 SU	AGL, A&Ww, FBC are attaining with 9 exceedances in 70 samples (binomial)
		8/20/2007	5.55 SU	
		9/4/2007	6.12 SU	
		10/2/2007	5.3 SU	
		11/6/2007	6.17 SU	
		2/5/2008	5.14 SU	
		7/1/2008	6.28 SU	
		4/7/2009	6.04 SU	
		5/5/2009	6.17 SU	
Selenium	2 ug/L	9/2/2008	3 ug/L	A&Ww is inconclusive with 1 exceedance in 3 samples. Note: This is an estimated value below detection limit.

Monitoring Summary

Sampling period: 7/26/2006 - 12/2/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT INSPIRATION DAM	SRPNL003.79	100727	Pinal Creek Group	Permit Monitoring
USGS SITE JJ15	SRPNL005.12	101518	ADEQ, Pinal Creek Group	Ambient, Permit Monitoring
AT SETKA RANCH	SRPNL006.87	101491	Pinal Creek Group	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(16-94) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3-98) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Selenium
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Beryllium (dissolved), cadmium (dissolved), copper (dissolved), selenium, cyanide, mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect more selenium samples to assess A&Wc attainment. Use lower detection limits for metals listed above.

Attainment Discussion
Additional data was submitted for this reach following the completion of the public comment period. The new dataset includes 9 exceedances in 70 samples occurred during the 2012/14 assessment window. Therefore, this reach is considered 'attaining' following the binomial rule. AGL, A&Ww and FBC are now 'attaining' for pH rather than being inconclusive. Reach status remains 'Attaining some uses', however, because of uncertainty over the status of A&Ww due to a selenium exceedance.

Pinto Creek

Headwaters - Tributary at 331927/1105456
15060103-018A
2.5 Miles

Category 4A
Not attaining

Dissolved Copper (1998)

IMPAIRMENT STATUS

FC - Inconclusive • FBC - Inconclusive • A&Wc - Not Attaining
AGL - Inconclusive • AGI - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: no current data

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
At Simpson Dam	SRPNT033.02	102428	ADEQ	TMDL

Metals Samples	Nutrients & Related Samples	Other Samples
none	none	none

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	none
Missing Core Parameters	all
Missing Seasonal Distribution	all
Lab Detection Limits Not Low Enough	none

Priority	Monitoring Recommendations
Low	All core parameters need coverage.

Impairment Discussion
Remains not attaining for dissolved copper. Pinto Creek copper TMDL completed in 2001.

PINTO CREEK

Trib at 331927 / 110545 To West Fork Pinto Creek
15060103-018B
15.3 Miles

Category 4A
Not attaining

Salt

IMPACTMENT STATUS

Copper (1998)

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper	500 ug/L (AGL) 1300 ug/L (FBC)	12/1/2007	2000 ug/L	AGL and FBC are attaining with 2 exceedances and 1 exceedance, respectively in 19 samples (binomial).
		12/11/2007	700 ug/L	
Copper ^d	9 ug/L ^{acute} , 6 ug/L ^{chronic} @ 63 mg/L hardness	8/7/2007	31 ug/L	A&Ww remains not attaining with 6 exceedances in 11 sample.
	7 ug/L ^{acute} , 5 ug/L ^{chronic} @ 59 mg/L hardness	12/1/2007	220 ug/L	
	8 ug/L ^{acute} , 5 ug/L ^{chronic} @ 50 mg/L hardness	12/11/2007	530 ug/L	
	7 ug/L ^{acute} , 5 ug/L ^{chronic} @ 60 mg/L hardness	1/28/2008	200 ug/L	
	10 ug/L ^{acute} , 7 ug/L ^{chronic} @ 74 mg/L hardness	2/5/2008	103 ug/L	
	40 ug/L ^{chronic} @ 400 mg/L hardness	4/7/2008	60 ug/L	
Dissolved oxygen	6.0 mg/L	7/11/2006	5.26 mg/L	A&Ww is inconclusive with 2 exceedances in 7 samples (binomial).
		1/23/2007	2.67 mg/L	
Lead	15 ug/L	12/1/2007	38 ug/L	FBC is inconclusive with 1 exceedance in 4 samples (binomial).
pH	6.5 SU	12/1/2007	6.15 SU	AGL, AGI, and FBC are attaining with 1 exceedance in 12 samples (binomial).
SSC	80 mg/L	1/28/2008	800 mg/L	A&Ww is inconclusive.

Monitoring Summary

Sampling period: 7/11/2006 - 12/26/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
300 FEET DOWN-STREAM OF IRON BRIDGE	SRPNT019.23	103313	BHP	Permit Monitoring
BELOW CARLOTA CACTUS BRECCIA	SRPNT023.29	102431	ADEQ	TMDL
ABOVE GIBSON MINE TRIBUTARY	SRPNT028.85	101062	ADEQ	TMDL
AT OLD HIGHWAY 60	SRPNT027.51	101064	ADEQ	TMDL
ABOVE COTTONWOOD GULCH AND BELOW CACTUS BRECCIA	SRPNT024.85	103311	BHP	Permit Monitoring

Metal Samples	Nutrients & Related Samples	Other Samples
(6-27) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(2) Nitrate, nitrite, nitrite/nitrate	(2-18) Dissolved oxygen, pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen, lead, SSC
Missing Core Parameters	Nitrogen, phosphorus, <i>E. coli</i>
Missing Seasonal Distribution	Nitrogen, phosphorus, <i>E. coli</i> , boron, lead
Lab Detection Limits Not Low Enough	Arsenic, arsenic (dissolved), cadmium (dissolved), copper (dissolved), lead, lead (dissolved), nickel (dissolved), selenium, silver (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
High	Use a lower lab reporting limit for selenium.

Impairment Discussion
Remains not attaining for dissolved copper. Pinto Creek copper TMDL completed in 2001.

PINTO CREEK

West Fork Pinto Creek - Roosevelt Lake
15060103-018C
18.4 Miles

Category 4A/5
Not attaining/Impaired

Salt

Selenium (2004) and copper (1998)

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Ww - Impaired

No Exceedances

Monitoring Summary

Sampling period: 8/27/2007 - 10/20/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE HENDERSON FORD	SRPNT008.48	100346	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4-5) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Selenium, mercury (dissolved)

Priority	Monitoring Recommendations
High	Collect selenium samples in support of TMDL development and <i>E. coli</i> to complete core parameter coverage.

Impairment Discussion
Remains impaired for selenium and not attaining for copper. Pinto Creek copper TMDL completed in 2001.

POWERS GULCH

Headwaters - Haunted Canyon
15060103-884
3.8 Miles

Category 3

Inconclusive

PBC - Inconclusive • A&We - Inconclusive

Use Support

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	53.5 ug/L @ 242 mg/L hardness	2/13/2008	66 ug/L	A&We is inconclusive with 1 exceedance in 5 samples.

Monitoring Summary

Sampling period: 7/11/2006 - 10/14/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
NEAR HAUNTED CANYON	SRPWG000.15	102665	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4-5) Arsenic, beryllium, cadmium, copper, manganese, selenium, zinc	(0) None	(2) Dissolved oxygen, pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Copper (dissolved)
Missing Core Parameters	Dissolved oxygen, pH, nitrogen, phosphorus
Missing Seasonal Distribution	Dissolved oxygen, pH, nitrogen, phosphorus
Lab Detection Limits Not Low Enough	Arsenic (dissolved), selenium

Priority	Monitoring Recommendations
Medium	Collect dissolved copper samples due to the exceedance. Collect pH, dissolved oxygen, nitrogen, & phosphorus samples to reflect 3 seasons over assessment period to complete core parameter coverage.

RESERVATION CREEK

Indian Reservation - Black River
15060101-010
3.3 Miles

Category 3
Inconclusive

Salt

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/2/2010 - 5/5/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE BLACK RIVER	SRRES000.33	100629	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

REYNOLDS CREEK

Headwaters - Workman Creek
15060103-202
6.8 Miles

Category 2

Attaining some uses

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	6/8/2011	3.94 mg/L	A&Wc is inconclusive with 1 exceedance in 4 samples (binomial).
<i>E. coli</i>	235 cfu/100 ml, SSM	9/22/2010	525 cfu/100 mL	FBC is inconclusive with 1 exceedance in 4 samples.
Nitrogen	0.6 mg/L, Annual mean	9/22/2010	0.712 mg/L	A&Wc and FBC are inconclusive with 1 annual mean exceedance.

Monitoring Summary

Sampling period: 9/22/2010 - 6/8/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW MCFADDEN CREEK	SRREY001.14	100630	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Nitrogen, dissolved oxygen, <i>E. coli</i>
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), mercury (dissolved)

Priority	Monitoring Recommendations
Medium	Collect dissolved oxygen, <i>E. coli</i> , and total nitrogen samples due to exceedances.

Mercury in fish tissue (2006/8 EPA)

DWS - Inconclusive • FC - Impaired • FBC - Inconclusive
AGI - Inconclusive • AGL - Inconclusive
A&Ww - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Copper ^d	19.7 ug/L ^{acute} , 12.7 ug/L ^{chronic} @ 150 mg/L hardness	5/5/2009	20 ug/L	A&Ww is inconclusive with 1 exceedance in 7 samples.
Dissolved oxygen	6.0 mg/L	9/24/2007	5.47 mg/L	A&Ww is attaining with 1 exceedance in 11 sample (binomial).
pH	9.0 SU	7/21/2008	9.3 SU	AGI, AGL, A&Ww, DWS, and FBC are inconclusive with 2 exceedances in 8 samples (binomial).
		9/22/2008	9.5 SU	
Phosphorus	0.06 mg/L, SSM	2/12/2008	0.108 mg/L	A&Ww and FBC are attaining with 1 exceedance in 12 samples (binomial).

Monitoring Summary
Sampling period: 9/24/2007 - 6/30/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
At Dam	SRR00-A	100075	ADEQ, AGFD	CLP
Salt River Inlet	SRR00-B	100076	ADEQ, AGFD	CLP
Northeast Of Boat Ramp	SRR00-C2	106243	ADEQ	CLP
Tonto Creek Inlet	SRR00-C	100077	ADEQ	CLP
At Marina	SRR00-MAR	101711	UA, ADEQ	CLP
Below Bumblebee Creek Off Highway 188	SRR00-B1	104417	ADEQ	CLP
At Salt River Inlet	SRR00-SAL	108822	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(19-23) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(4-23) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(24-27) Dissolved oxygen, pH, total dissolved solids,

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	pH, copper (dissolved)
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more pH and dissolved copper samples due to exceedances. Collect fish tissue samples in support of TMDL development.

Impairment Discussion
EPA overfiled for mercury in fish tissue (2006/8).

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
 A&Ww - Inconclusive

No Exceedances

Monitoring Summary
 Sampling period: 3/14/2011 - 3/14/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW RYE AZ.	SRRYE006.15	102833	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved)

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

DWS - Inconclusive • FC - Inconclusive • FBC - Inconclusive
 AGI - Attaining • AGL - Attaining • A&Ww - Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	10/11/2006	2 mg/L	A&Ww is attaining with 3 exceedances in 16 samples (binomial).
		9/27/2007	4.2 mg/L	
		7/31/2008	2.92 mg/L	
pH	9.0 SU	5/29/2008	9.4 SU	AGI, AGL, A&Ww, DWS, and FBC are attaining with 3 exceedances in 16 samples (binomial).
		6/19/2008	9.2 SU	
		7/31/2008	9.7 SU	
Thallium	2 ug/L (DWS)	2/26/2008	34 mg/L	DWS, FBC, and FC are inconclusive with 1 exceedance in 6 samples (binomial).
Nitrogen	1 mg/L, SSM 0.03 mg/L, Annual mean	1/29/2008	1.75 mg/L	A&Ww & FBC are attaining with 3 exceedances in 16 samples (binomial). 3 numeric annual mean exceedances were not composites at 1,2, &5 meters as required.
		3/19/2008	1.34 mg/L	
		4/9/2008	1.06 mg/L	
		7/06-6/07	0.33 mg/L	
		7/07-6/08	0.43 mg/L	
		7/08-6/09	0.23 mg/L	
Phosphorus	0.06 mg/L, SSM 0.03 mg/L, Annual mean	10/11/2006	0.068 mg/L	A&Ww & FBC are inconclusive with 6 exceedances in 16 samples (binomial). 3 numeric annual average exceedances though none were composites at 1,2, & 5 meters as required.
		12/4/2007	0.08 mg/L	
		1/29/2008	0.42 mg/L	
		2/26/2008	0.097 mg/L	
		3/19/2008	0.09 mg/L	
		4/9/2008	0.08 mg/L	
		7/06-6/07	0.045 mg/L	
		7/07-6/08	0.077 mg/L	
		7/08-6/09	0.035 mg/L	

Monitoring Summary

Sampling period: 9/13/2006 - 5/12/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
850 METERS ACROSS FROM BUTCHER JONES SITE	SRSAG-NLS	105800	ADEQ	CLP
AT DAM	SRSAG-A	100082	ADEQ	CLP
SOUTHEAST OF BAGLEY FLAT	SRSAG-C	101810	ADEQ	CLP
AT MARINA SITE 2	SRSAG-MAR2	100995	ADEQ	CLP
AT CAMPGROUND	SRSAG-MFLAT	101698	AGFD	CLP
MID LAKE SITE	SRSAG-B	104397	ADEQ	CLP

Metal Samples	Nutrients & Related Samples	Other Samples
(19-23) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(3-42) Ammonia, nitrate, nitrite, nitrite/nitrate, nitrogen, phosphate, phosphorus, total Kjeldahl nitrogen	(22-42) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Thallium, phosphorus
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), mercury (dissolved), nickel (dissolved), selenium, thallium

Priority	Monitoring Recommendations
Medium	Collect more nitrogen, phosphorus, and thallium samples due to exceedances.

SALT RIVERCanyon Creek - Cherry Creek
15060103-007
19.6 Miles**Category 5**
Impaired**Add selenium to the 303(d) list.**FC - Attaining • FBC - Attaining • AGI - Attaining
AGL - Attaining • A&Ww - Impaired**Exceedances**

Parameter	Applicable Standard	Date	Result	Designated use support comments
Selenium	2 ug/L	7/19/2010	2.2 ug/L	A&Ww chronic is impaired with 2 exceedances.
		5/25/2011	2.9 ug/L	

Monitoring Summary
Sampling period: 7/19/2010 - 5/25/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT GLEASON FLAT	SRSLR139.75	108422	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Mercury (dissolved)

Priority	Monitoring Recommendations
High	Collect selenium samples in support of TMDL development.

Impairment Discussion

Relatively high turbidity and TSS on 7/19 may indicate upset (i.e. non-chronic) conditions. 1.3 inches of rain in Globe on the 17th, 0 on the 18th and .25 on the 19th and precipitation map shows widespread rain in area (see documentation).

E. coli, phosphorus, and nitrogen (2010) and SSC (2006/8)

FC - Attaining • FBC - Impaired • AGI - Attaining
AGL - Attaining • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 mL, SSM	8/15/2006	7100 cfu/100 mL	FBC remains impaired with 2 exceedances in 14 samples.
		12/4/2007	1600 cfu/100 mL	
Lead	15 ug/L	8/15/2006	32.8 ug/L	FBC is attaining with 2 exceedances in 14 samples (binomial).
		1/29/2008	25.9 ug/L	
SSC	80 mg/L	8/15/2006	2520 mg/L	A&Ww is attaining with no median exceedances. All single sample exceedances except 3/20/2007 occurred during storm events and were excluded from assessment.
		3/20/2007	102 mg/L	
		9/11/2007	631 mg/L	
		12/4/2007	488 mg/L	
		1/29/2008	3470 mg/L	
Nitrogen	0.6 mg/L, Annual mean 2.0 mg/L, SSM	8/06 - 6/07	1.013 mg/L	A&Ww and FBC remain impaired with 2 annual mean exceedances.
		9/07 - 6/08	0.976 mg/L	
		8/15/2006	4.75 mg/L	
		1/29/2008	3.18 mg/L	
Phosphorus	0.12 mg/L, Annual mean 1.0 mg/L, SSM	8/06 - 6/07	0.203 mg/L	A&Ww and FBC remain impaired with 2 annual mean exceedances.
		9/07 - 6/08	0.54 mg/L	
		1/29/2008	2.44 mg/L	
Mercury ^d	0.01 ug/L	4/11/2007	0.012 ug/L	A&Ww chronic is inconclusive with 1 exceedance.

Monitoring Summary

Sampling period: 8/15/2006 - 12/2/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
Above Lake Roosevelt	SRSLR107.43	100745	USGS	USGS

Metal Samples	Nutrients & Related Samples	Other Samples
(14) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(14) Nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(14) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Mercury (dissolved)
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
High	Collect more samples in support of TMDL development.

Impairment Discussion
The reach is impaired for <i>E. coli</i> , ssc, nitrogen and phosphorus.

SALT RIVER

Stewart Mountain Dam - Verde River
15060106A-003
10.1 Miles

Category 5
Impaired

IMPAIRMENT STATUS

Dissolved oxygen (2004)

DWS - Attaining • FC - Attaining • FBC - Inconclusive
AGI - Attaining • AGL - Attaining • A&Ww - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	6.0 mg/L	8/24/2006	3 mg/L	A&Ww remains impaired with 3 exceedances in 7 samples (binomial).
		7/25/2007	5.5 mg/L	
		9/24/2008	5.7 mg/L	
Phosphorus	0.05 mg/L, Annual mean	8/06 - 5/07	0.052 mg/L	A&Ww and FBC are inconclusive. Need more data for impairment determination.
		7/08 - 12/08	0.057 mg/L	
Nitrogen	3 mg/L, SSM	4/14/2008	4.3 mg/L	A&Ww and FBC are attaining with 2 exceedance in 35 samples (binomial). No annual average exceedances (time frame for calculation changed from 2010).
		5/12/2008	3.7 mg/L	
SSC	80 mg/L	5/9/2007	531 mg/L	A&Ww is attaining with no median exceedances in 10 samples.
		12/12/2007	136 mg/L	

Monitoring Summary

Sampling period: 7/11/2006 - 12/8/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW STEWART MOUNTAIN DAM	SRSLR051.32	100746	USGS	USGS
BELOW STEWART MOUNTAIN DAM	SRSLR054.32	103131	SRP	SRP

Metal Samples	Nutrients & Related Samples	Other Samples
(21-40) Antimony, arsenic, barium, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, nickel, selenium, silver, thallium, zinc	(10-40) Nitrate, nitrite, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(40) Dissolved oxygen, <i>E. coli</i> , naphthalene, pH, SSC, total dissolved solids, styrene, , tetrachloroethylene, toluene, trichlorobenzene, trichloroethane 111, trichloroethane 112, trichloroethylene, trihalomethanes, vinylchloride, xylene, tetrachloroethane

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Dibromochloropropane, selenium, tetrachloroethane, hexachlorobutadiene

Priority	Monitoring Recommendations
High	Collect more dissolved oxygen samples in support of TMDL development. Collect more phosphorus samples due to exceedances.

Impairment Discussion
Remains impaired for dissolved oxygen (2004).

SNAKE CREEK

Headwaters To Black River
15060101-045
6.2 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 7/31/2007 - 5/20/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
1.3 MILES ABOVE BLACK RIVER	SRSNK001.33	101298	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(2) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

SPRING CREEK (SPI)

Headwaters - Tonto Creek
15060105-010
20.5 Miles

Category 2

Attaining some uses

Salt

FC - Attaining • FBC - Inconclusive • AGL - Attaining
A&Ww - Inconclusive

No Exceedances

Monitoring Summary

Sampling period: 9/18/2007 - 11/5/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE BRYANT CANYON	SRSPI011.63	100651	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	Lead (dissolved), nickel (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

STINKY CREEK

Headwaters - Fort Apache Res
15060101-352A
2.1 Miles

Category 3
Inconclusive

FC - Inconclusive • FBC - Inconclusive • AGL - Inconclusive
A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	6/18/2008	4.24 mg/L	A&Wc is inconclusive with 1 exceedance in 2 samples (binomial).
SSC	25 mg/L	7/30/2007	30 mg/L	A&Wc is inconclusive. Not enough samples to calculate a median.

Monitoring Summary

Sampling period: 7/30/2007 - 6/18/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE WEST FORK BLACK RIVER	SRSTI000.38	101303	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(3) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-3) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen, SSC
Missing Core Parameters	Dissolved oxygen, nitrogen, phosphorus, copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , copper, lead
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), zinc (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect dissolved oxygen and SSC samples due to exceedances. Most core parameters need seasonal distribution coverage, many need sample number coverage as well.

THOMPSON DRAW

Headwaters - Billy Creek
15060105-378
7.1 Miles

Category 3
Inconclusive

Salt

PBC - Inconclusive • A&We - Inconclusive

Use Support

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	576 cfu/100 mL, SSM	7/23/2010	1724 cfu/100 mL	PBC is inconclusive with 1 exceedance in 2 samples. Note: This exceedance is storm-related.

Monitoring Summary

Sampling period: 3/4/2008 - 7/23/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
DOWN STREAM FROM THOMPSON SUB DIVISION	SRTH0003.23	106365	ADEQ	TMDL
UP STREAM FROM THOMPSON SUB DIVISION	SRTH0003.94	106366	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(2) Antimony, arsenic, barium, beryllium, boron, cadmium, lead, manganese, mercury, selenium, zinc	(2) Ammonia, nitrogen, total Kjeldahl nitrogen	(2-4) Dissolved oxygen, <i>E. coli</i> , pH, SSC

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	<i>E. coli</i>
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect <i>E. coli</i> samples due to the exceedance.

TONTO CREEK (TON)

Greenback Creek - Roosevelt Lake
15060105-004
2.6 Miles

Category 5
Impaired

Salt

Mercury in fish tissue (EPA 2010)

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Inconclusive
EPA FC - Impaired

No Exceedances

Monitoring Summary

Sampling period: 11/10/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT GREENBACK CREEK CONFLUENCE	SRTON011.00	108542	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) Dissolved oxygen, pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
EPA overfile for mercury in fish tissue (2010)

TONTO CREEK (TON)

Haigler Creek - Spring Creek
15060105-011
7.8 Miles

Category 5
Impaired

Mercury in fish tissue (EPA 2010)

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Inconclusive
EPA FC - Impaired

No Exceedances

Monitoring Summary

Sampling period: 10/12/2007

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
Below Haigler Creek, At Hellsgate	SRTON046.90	100669	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(1) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	Selenium

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion

EPA overfile for mercury in fish tissue (2010)

Mercury in fish tissue (EPA 2010)

Impairment

Not Assessed
 EPA FC - Impaired

Status

No Exceedances

Monitoring Summary
not assessed

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
TONTO CREEK - ABOVE USGS GAGE ABOVE GUN CREEK	SRTON019.37	100349	ADEQ	FSN
Metals Samples		Nutrients & Related Samples		Other Samples

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	none
Missing Core Parameters	all
Missing Seasonal Distribution	all
Lab Detection Limits Not Low Enough	none

Priority	Monitoring Recommendations
High	Collect fish tissue samples and water quality samples for source identification.

Impairment Discussion
No available water quality data within assessment period. EPA overfile for mercury in fish tissue.

Tonto Creek
Rye Creek to Gun Creek
15060105-008
18.6 Miles

Category 5
Impaired

Mercury in fish tissue (EPA 2010)

Impairment

Not Assessed

EPA FC - Impaired

Status

No Exceedances

Monitoring Summary

not assessed

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose

Metals Samples	Nutrients & Related Samples	Other Samples

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	none
Missing Core Parameters	all
Missing Seasonal Distribution	all
Lab Detection Limits Not Low Enough	none

Priority	Monitoring Recommendations
High	Collect fish tissue samples and water quality samples for source identification.

Impairment Discussion
No established sampling site, no available water quality data within assessment period. EPA overfile for mercury in fish tissue.

TONTO CREEK (TON)

Headwaters - Tributary at 34 18 10 / 111 04 14
15060105-013A
8.1 Miles

Category 4A/5
Not attaining/Impaired

Salt

*Low dissolved oxygen (2006),
nitrogen (2004 EPA), and E. coli (2004)*

FC - Attaining • FBC - Not Attaining • AGL - Attaining
AGL - Attaining • A&Wc - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	10/11/2006	5.92 mg/L	A&Wc remains impaired with 4 exceedances in 23 samples (binomial).
		10/24/2006	6.68 mg/L	
		7/8/2008	5.98 mg/L	
		8/12/2008	5.71 mg/L	
<i>E. coli</i>	235 cfu/100 mL, SSM	8/12/2008	325.5 cfu/100 mL	FBC remains not attaining with 2 exceedances in 22 samples.
		6/30/2011	365.4 cfu/100 mL	
pH	6.5 SU	8/24/2010	6.13 SU	AGL, A&Wc, and FBC are attaining with 1 exceedance in 24 samples (binomial).
Nitrogen	0.5 mg/L, Annual mean 2.0 mg/L, SSM	7/2010 - 5/2011	0.52 mg/L	A&Wc remains not attaining with 1 annual mean exceedance and 1 single sample maximum.
		10/11/2006	3.05 mg/L	

Monitoring Summary

Sampling period: 10/11/2006 - 6/30/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW AGFD HATCHERY MIXING ZONE	SRTON062.28	101017	ADEQ	TMDL
BELOW CHRISTIAN CAMP ROAD	SRTON060.50	100352	ADEQ	TMDL
BELOW HORTON CREEK	SRTON059.43	100353	ADEQ	Ambient
BELOW TONTO SPRING	SRTON062.89	101016	ADEQ	TMDL
BELOW KOHLS RANCH	SRTON057.70	100929	ADEQ	TMDL

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE HIGHWAY 260 AT KOHLS RANCH	SRTON058.63	100354	ADEQ	TMDL
DOWN STREAM OF CHRISTIAN CAMP TRIBUTARY	SRTON060.28	106059	ADEQ	TMDL
ABOVE CHRISTIAN CAMP	SRTON061.37	101018	ADEQ	TMDL
BELOW TONTO FISH HATCHERY OUTFALL	SRTON062.65	108443	ADEQ	Ambient
ABOVE CHRISTOPHER CREEK	SRTON056.59	100359	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(2-6) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(72-98) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(15-105) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more samples in support of TMDL development and effectiveness monitoring.

Impairment Discussion
Remains impaired for dissolved oxygen and not attaining for nitrogen and <i>E. coli</i> . Nutrient (2005) and <i>E. coli</i> (2004) TMDLs completed.

TONTO CREEK (TON)

Spring Creek - Rye Creek
15060105-009
19.5 Miles

Category 5
Impaired

Salt

Mercury in fish tissue (EPA 2010)

FC - Inconclusive • FBC - Inconclusive • AGI - Inconclusive
AGL - Inconclusive • A&Ww - Inconclusive
EPA FC - Impaired
No Exceedances

Monitoring Summary

Sampling period: 9/3/2008 - 8/26/2009

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
AT OLD GAGING STATION ABOVE HOUSTON CREEK	SRTON032.38	107462	ADEQ	TMDL
DOWNSTREAM OF HOUSTON CREEK	SRTON031.72	106722	ADEQ	TMDL
US OF HOUSTON CREEK AT THE NARROWS	SRTON032.62	100668	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(2-3) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1-3) Dissolved oxygen, <i>E. coli</i> , pH, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, phosphorus, cadmium (dissolved), copper (dissolved), boron, manganese, copper, lead
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i> , boron, manganese, copper, lead
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

Impairment Discussion
EPA overfile for mercury in fish tissue (2010)

TONTON CREEK (TON)

Tributary @ 341810/1110414 - Haigler Creek
15060105-013B
8.5 Miles

Category 4A/5

Not attaining/Impaired

*Nitrogen (EPA 2004), E. coli (2004),
Mercury in fish tissue (EPA 2010)*

FC - Attaining • FBC - Not Attaining • AGI - Attaining
AGL - Attaining • A&Ww - Not Attaining
EPA FC - Impaired

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
<i>E. coli</i>	235 cfu/100 mL, SSM	7/7/2008	461 cfu/100 mL	FBC remains not attaining with 5 exceedances in 20 samples.
		8/12/2008	866 cfu/100 mL	
		9/3/2008	1299 cfu/100 mL	
		7/12/2010	3629 cfu/100 mL	
		7/23/2010	3628 cfu/100 mL	
Nitrogen	0.5 mg/L, Annual mean 2.0 mg/L, SSM	7/2010 - 6/2011	1.4 mg/L	A&Ww and FBC remain not attaining with 1 annual mean exceedance.
		7/23/2010	8.9 mg/L	
		9/8/2010	3.3 mg/L	
Phosphorus	0.1 mg/L, Annual mean 0.8 mg/L, SSM	8/2008 - 4/2009	0.13 mg/L	A&Ww and FBC are inconclusive. Need more data for impairment determination.
		7/2010 - 6/2011	0.106 mg/L	
		7/23/2010	4.1 mg/L	

Monitoring Summary

Sampling period: 10/11/2006 - 6/29/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE BEAR FLATS	SRTON055.09	100357	ADEQ	TMDL
BELOW BEAR FLATS	SRTON053.87	100358	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(30-34) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(8-38) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	None
Missing Seasonal Distribution	Zinc (dissolved), cadmium (dissolved)
Lab Detection Limits Not Low Enough	Mercury (dissolved), nickel (dissolved), selenium

Priority	Monitoring Recommendations
High	Collect more samples in support of TMDL development and effectiveness monitoring. Collect more phosphorus samples due to exceedances.

Impairment Discussion
Remains not attaining for nitrogen and for E. coli. EPA overfile for mercury in fish tissue (2010).

TRIB (UT1) TO TONTO CREEK

Headwaters - Tonto Creek
15060105-647
1.2 Miles

Category 3

Inconclusive

PBC - Inconclusive • A&We - Inconclusive

Use Support

No Exceedances**M**onitoring Summary

Sampling period: 3/19/2008 - 3/19/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
CHRISTIAN CAMP	SRUT1000.01	106363	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(1) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(1) Dissolved oxygen, <i>E. coli</i> , pH

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

TRIB (UT2) TO TONTO CREEK

Headwaters - Tonto Creek
15060105-365
1.8 Miles

Category 3
Inconclusive

Salt

FC - Inconclusive • FBC - Inconclusive • A&Wc - Inconclusive

Use Support

No Exceedances

Monitoring Summary

Sampling period: 5/2/2008 - 7/8/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
ABOVE MOUTH POINT	SRUT2000.01	106682	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(0) None

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), dissolved oxygen, pH, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Missing Seasonal Distribution	Zinc (dissolved), dissolved oxygen, pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved), <i>E. coli</i>
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Collect core parameters to represent at least 3 seasons during an assessment period.

TRIB (UTO) TO TONTO CREEK

Headwaters - Tonto Creek
15060105-372
2.9 Miles

Category 3

Inconclusive

PBC - Inconclusive • A&We - Inconclusive

Use Support

No Exceedances**M**onitoring Summary

Sampling period: 3/4/2008 - 3/4/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
FROM WEST SIDE OF TONTO CREEK ROAD	SRUTO000.02	106362	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) <i>E. coli</i>

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

TRIB TO CHRISTOPHER CREEK

Headwaters - Christopher Creek
15060105-362
2.4 Miles

Category 3
Inconclusive

Salt

PBC - Inconclusive • A&We - Inconclusive

Use Support

No Exceedances

Monitoring Summary

Sampling period: 3/4/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
R-BAR-C TRIB	SRUCR000.01	106364	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) <i>E. coli</i>

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

TRIB TO THOMPSON DRAW

Headwaters - Thompson Draw
15060105-379
0.8 Miles

Category 3

Inconclusive

PBC - Inconclusive • A&We - Inconclusive

Use Support

No Exceedances**M**onitoring Summary

Sampling period: 7/23/2010 - 7/23/2010

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW FR 405 CROSS-ING	SRUTD000.10	108462	ADEQ	TMDL

Metal Samples	Nutrients & Related Samples	Other Samples
(0) None	(0) None	(1) <i>E. coli</i>

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	None
Missing Core Parameters	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Missing Seasonal Distribution	Zinc (dissolved), pH, nitrogen, phosphorus, cadmium (dissolved), copper (dissolved)
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Low	Not enough data to assess. Collect core parameters to represent at least 3 seasons during an assessment period.

WEST FORK PINTO CREEK

Headwaters - Pinto Creek
15060103-066
11.6 Miles

Category 2

Attaining some uses

Salt

Use Support

FBC - Inconclusive • A&Ww - Inconclusive • FC - Attaining

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Nitrogen	2.0 mg/L, SSM 0.6 mg/L, Annual mean	12/17/2007	2.94	A&Ww and FBC are inconclusive with 1 SSM exceedance in 6 samples (binomial) and 1 annual mean exceedance.
		12/2007 - 6/2008	0.89	
Bottom Deposits	< 50% fines	9/30/2008	51%	A&Ww is inconclusive with 1 exceedance.

Monitoring Summary

Sampling period: 12/17/2007 - 6/2/2011

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW KENNEDY RANCH	SRWPN004.47	102433	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(6) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, selenium, zinc	(6) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(4-7) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids, bottom deposits

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Nitrogen, bottom deposits
Missing Core Parameters	None
Missing Seasonal Distribution	None
Lab Detection Limits Not Low Enough	None

Priority	Monitoring Recommendations
Medium	Collect more total nitrogen samples due to exceedances. Good core parameter coverage with few samples.

WORKMAN CREEK

Headwaters - Reynolds Creek
15060103-195A
7.1 Miles

Category 2
Attaining some uses

FC - Attaining • FBC - Inconclusive • AGI - Attaining
AGL - Attaining • A&Wc - Inconclusive

Exceedances

Parameter	Applicable Standard	Date	Result	Designated use support comments
Dissolved oxygen	7.0 mg/L	8/29/2007	6.71 mg/L	A&Wc is inconclusive with 1 exceedance in 4 samples (binomial).

Monitoring Summary

Sampling period: 8/29/2007 - 11/18/2008

Site Name(s)	Site ID #	DEQ #	Sampling Agency	Purpose
BELOW FALLS	SRWRK007.97	100696	ADEQ	Ambient

Metal Samples	Nutrients & Related Samples	Other Samples
(4) Antimony, arsenic, beryllium, boron, cadmium, chromium, copper, lead, manganese, mercury, zinc, selenium	(3-4) Ammonia, nitrite/nitrate, nitrogen, phosphorus, total Kjeldahl nitrogen	(2-5) Dissolved oxygen, <i>E. coli</i> , pH, SSC, total dissolved solids

Data Gaps and Monitoring Needs

Exceedances Needing More Samples to Assess	Dissolved oxygen
Missing Core Parameters	<i>E. coli</i>
Missing Seasonal Distribution	<i>E. coli</i>
Lab Detection Limits Not Low Enough	Cadmium (dissolved), copper (dissolved), lead (dissolved), mercury (dissolved), selenium

Priority	Monitoring Recommendations
Low	Collect more dissolved oxygen samples due to the exceedance. <i>E. coli</i> needs sample/seasonal coverage.