

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
REGION IX  
75 Hawthorne Street  
San Francisco, CA 94105**

**AUTHORIZATION TO DISCHARGE UNDER THE  
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

**NPDES PERMIT NO. AZ0024643**

In compliance with the provisions of the Clean Water Act ("CWA") (Public Law 92-500, as amended, 33 U.S.C. 1251 et seq.), the following discharger is authorized to discharge from the identified facility at the outfall location(s) specified below, in accordance with the effluent limits, monitoring requirements, and other conditions set forth in this permit:


Discharger Name	City of Phoenix
Discharger Address	200 West Washington Street, 9 <sup>th</sup> Floor Phoenix, AZ 85003
Facility Name	Verde Infrastructure (Verde Water Main)
Facility Location Address	Verde Water Treatment Plant Water Main from 33° 32' 49.12"N, 111° 40' 01.35"W to end of pipe at Pima Road, 33° 29' 09.93"N, 111° 53' 30.89"W
	Maricopa County
Facility Rating	minor

Outfall Number	General Type of Waste Discharged	Latitude	Longitude	Receiving Water
001	Potable water (1)	33° 32' 49.12"N	111° 40' 01.35"W	Verde/Salt River
		33° 29' 09.93"N	111° 53' 30.89"W	

(1) Intermittent potable water discharge from the Verde Water Main, which is a pipeline beginning at the Verde Water Treatment Plant, 33° 32' 49.12"N, 111° 40' 01.35"W to end of pipe at Pima Road, 33° 29' 09.93"N, 111° 53' 30.89"W, to the tributaries of the Verde and Salt Rivers.

This permit was issued on:	October 1st, 2007
This permit shall become effective on:	October 4th, 2007
This permit shall expire at midnight on:	October 3rd, 2012
In accordance with 40 CFR 122.21(d), the discharger shall submit a new application for a permit at least 180 days before the expiration date of this permit, unless permission for a date no later than the permit expiration date has been granted by the Director.	

Signed this 1<sup>st</sup> day of October, 2007, for the Regional Administrator.

  
 Alexis Strauss, Director  
 Water Division

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## PART I – DISCHARGE LIMITS AND MONITORING

### A. Discharge Limits and Monitoring

#### 1. Discharge Limits

During the period beginning on the effective date of this permit and ending on the expiration date of this permit, the discharger is authorized to discharge potable water in compliance with the final effluent limits and monitoring requirements specified in Table 1. Compliance with these requirements is monitored at all points of discharge.

2. The discharge of pollutants at any point other than from the water line specifically authorized in this permit is prohibited, and constitutes a violation thereof.
3. The discharger shall provide at least 24 hour notice to the Salt River Pima Maricopa Indian Community (SRPMIC) Public Works prior to any planned discharge. In an emergency, contact shall be provided within 8 hours of the commencement of discharge. During normal work hours, contact can be made at 480-850-8260. After hours, contact SRPMIC dispatch at 480-850-9230 and ask that any message be relayed to the Public Works Director.
4. The discharge shall be dechlorinated prior to discharge.
5. There shall be no discharge of pollutants in amounts or combinations to the receiving water that will:
  - a. Settle to form bottom deposits that inhibit or prohibit the habitation, growth or propagation of aquatic life;
  - b. Cause objectionable odor in the area in which the surface water is located;
  - c. Cause off flavor in aquatic organisms;
  - d. Are toxic to humans, animals, plants or other organisms;
  - e. Cause the growth of algae or aquatic plants that inhibit or prohibit the habitation, growth or propagation of aquatic life or that impair recreational uses; or
  - f. Change the color of the surface water from natural background levels of color.
6. The discharge shall not cause the temperature of the receiving water to increase by more than 3.0 °C.
7. The discharge shall not cause the pH of the receiving water to change by more than 0.5 standard units.
8. The discharge shall not cause the dissolved oxygen concentration in the Salt River or Verde River to fall below 6.0.
9. A surface water shall be free from oil, grease, and other pollutants that float as debris, foam or scum or that cause a film or iridescent appearance on the surface of the water; or that cause a deposit on a shoreline, bank; or aquatic vegetation. The discharge of

lubricating oil or gasoline associated with the normal operation of a recreational watercraft is not a violation.

10. A discharge of suspended solids to a surface water shall not be in quantities or concentrations that either interfere with the treatment processes at the nearest downstream potable water treatment plant or substantially increase the costs of handling solids produced at the nearest downstream potable water treatment plant.
11. Discharge samples taken in compliance with the limits and monitoring requirements specified in Part I of this permit shall be taken after the last treatment process as it discharges from the pipe.

**Table 1. Effluent Limits and Monitoring Requirements**

Parameter	Maximum Allowable Discharge Limits		Monitoring Requirements		
	Maximum Daily	Units	Location	Frequency	Sample Type
Flow Volume and Duration	(1).	mgd and hours	point of discharge from water main	per discharge	estimate
Location of discharge	(1)	Latitude and longitude	point of discharge from water main	per discharge	discrete
Chlorine, total residual (TRC)	11 (2)	ug/L	point of discharge from water main	per discharge	discrete
Total Trihalomethanes (TTHMs)	100	ug/L	point of discharge from water main	per discharge	discrete

1. No effluent limits are set at this time, but monitoring and reporting are required.
2. This limit is below the method detection level for the approved field methods for this parameter. See D.4a below for reporting.

**PART II – STANDARD CONDITIONS**

**A. All NPDES Permits**

In accordance with 40 CFR 122.41, the following conditions apply to all NPDES permits and are expressly incorporated into this permit.

1. Duty to comply; at 40 CFR 122.41(a).
2. Duty to reapply; at 40 CFR 122.41(b).
3. Need to halt or reduce activity not a defense; at 40 CFR 122.41 (c).
4. Duty to mitigate; at 40 CFR 122.41(d).

5. Proper operation and maintenance; at 40 CFR 122.41(e).
6. Permit actions; at 40 CFR 122.41(f).
7. Property rights; at 40 CFR 122.41(g).
8. Duty to provide information; at 40 CFR 122.41(h).
9. Inspection and entry; at 40 CFR 122.41(i).
10. Monitoring and records; at 40 CFR 122.41(j).
11. Signatory requirement; at 40 CFR 122.41(k).
12. Reporting requirements; at 40 CFR 122.41(l).
13. Bypass; at 40 CFR 122.41(m).
14. Upset; at 40 CFR 122.41(n).

### **PART III – SPECIAL CONDITIONS**

#### **A. Permit Reopener(s)**

1. In accordance with 40 CFR 122 and 124, this permit may be modified by EPA to include effluent limits, monitoring, or other conditions to implement new regulations, including EPA-approved water quality standards; or to address new information indicating the presence of effluent toxicity or the reasonable potential for the discharge to cause or contribute to exceedances of water quality standards.

#### **B. Twenty-four Hour Reporting of Noncompliance**

1. In accordance with 40 CFR 122.41(l)(6)(i), (ii), and (iii), the following condition is expressly incorporated into this permit. The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances, to EPA. The permittee shall notify EPA at the following telephone number:

U.S. Environmental Protection Agency  
CWA Compliance Office (WTR-7)  
(415) 972-3577

A written submission shall also be provided within five days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates

and times; and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

2. The following information shall be included as information which must be reported within 24 hours under this paragraph.
  - a. Violation of a maximum daily discharge limit.
3. The Director may waive the written report on a case-by-case basis for reports required under paragraph B.2, if the oral report has been received within 24 hours.

#### D. General Monitoring and Reporting

1. For an intermittent discharge, on the first day of each such intermittent discharge, the permittee shall monitor and record data for all the parameters listed in the monitoring requirements, after which the frequencies of analysis listed in the monitoring requirements will apply for the duration of the discharge. If there is no discharge, no monitoring is required.
2. All monitoring shall be conducted in accordance with 40 CFR 136 test methods, unless otherwise specified in this permit. For discharge analyses required in Table 1 of this permit, the permittee shall utilize 40 CFR 136 test methods with MDLs and MLs that are lower than the limits in Table 1 of this permit and the water quality criteria concentrations in Arizona Water Quality Standards. If all MDLs or MLs are higher than these effluent limits or criteria concentrations, then the permittee shall utilize the test method with the lowest MDL or ML. In this context, the permittee shall ensure that the laboratory utilizes a standard calibration where the lowest standard point is equal to or less than the ML.
3. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 20th edition of *Standard Methods for the Examination of Water and Wastewater* shall be used.
4. The permittee shall develop a Quality Assurance (“QA”) Manual for the field collection and laboratory analysis of samples. The purpose of the QA Manual is to assist in planning for the collection and analysis of samples and explaining data anomalies if they occur. At a minimum, the QA Manual shall include the following:
  - a. Identification of project management and a description of the roles and responsibilities of the participants; purpose of sample collection; matrix to be sampled; the analytes or compounds being measured; applicable technical, regulatory, or program-specific action criteria; personnel qualification requirements for collecting samples;

- b. Description of sample collection procedures; equipment used; the type and number of samples to be collected including QA/Quality Control (“QC”) samples; preservatives and holding times for the samples (see 40 CFR 136.3); and chain of custody procedures;
  - c. Identification of the laboratory used to analyze the samples; provisions for any proficiency demonstration that will be required by the laboratory before or after contract award such as passing a performance evaluation sample; analytical method to be used; MDL and ML to be reported; required QC results to be reported (e.g., matrix spike recoveries, duplicate relative percent differences, blank contamination, laboratory control sample recoveries, surrogate spike recoveries, etc.) and acceptance criteria; and corrective actions to be taken in response to problems identified during QC checks; and
  - d. Discussion of how the permittee will perform data review and reporting of results to EPA and ADEQ and how the permittee will resolve data quality issues and identify limits on the use of data.
5. Throughout all field collection and laboratory analyses of samples, the permittee shall use the QA/QC procedures documented in their QA Manual. If samples are tested by a contract laboratory, the permittee shall ensure that the laboratory has a QA Manual on file. A copy of the permittee’s QA Manual shall be retained on the permittee’s premises and available for review by EPA ADEQ upon request. The permittee shall review its QA Manual annually and revise it, as appropriate.
  6. If no discharge occurs, no monitoring is required. Report “C” in the “No Discharge” box on the DMR form for that month.
  7. Samples collected during each month of the reporting period must be reported on Discharge Monitoring Report forms, as follows:
    - a. For a *maximum daily* permit limit or monitoring requirement when one or more samples are collected during the month, report either:

The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or *NODI (Q)*, if the maximum value of all analytical results is greater than or equal to the laboratory’s MDL, but less than the ML; or *NODI (B)*, if the maximum value of all analytical results is less than the laboratory’s MDL.
    - b. For an *average weekly* or *average monthly* permit limit or monitoring requirement when only one sample is collected during the week or month, report either:

The *maximum value*, if the maximum value of all analytical results is greater than or equal to the ML; or *NODI (Q)*, if the maximum value of all analytical results is greater than or equal to the laboratory’s MDL, but less than the ML; or *NODI (B)*, if the maximum value of all analytical results is less than the laboratory’s MDL.

- c. For an *average weekly* or *average monthly* permit limit or monitoring requirement when more than one sample is collected during the week or month, report either:

The *average value* of all analytical results where 0 (zero) is substituted for *NODI (B)* and the *laboratory's MDL* is substituted for *NODI (Q)*.

8. As an attachment to each DMR form, the permittee shall report for all parameters with monitoring requirements specified in Table 1 of this permit: the test method number or title and MDL or ML required by this permit; the test method number or title and preparation procedure used by the laboratory, the laboratory's MDL for the test method computed in accordance with Appendix B of 40 CFR 135, the standard deviation (S) from the laboratory's MDL study, and the number of replicate analyses (*n*) used to compute the laboratory's MDL; and the laboratory's lowest calibration standard.
9. In addition to information requirements specified under 40 CFR 122.41(j)(3), records of monitoring information shall include: the laboratory which performed the analyses and any comment, case narrative, or summary of results produced by the laboratory. The records should identify and discuss QA/QC analyses performed concurrently during sample analyses and whether project and 40 CFR 136 requirements were met. The summary of results must include information on initial and continuing calibration, surrogate analyses, blanks, duplicates, laboratory control samples, matrix spike and matrix spike duplicate results, and sample condition upon receipt, holding time, and preservation.
10. All monitoring results shall be submitted in such a format as to allow direct comparison with the discharge limits, monitoring requirements, and conditions of this permit. Monitoring results must be reported on EPA Form 3320-1, Discharge Monitoring Report form ("DMR") provided by EPA Region 9 Water Division or duplicate EPA Form 3320-1. A DMR form must be submitted for the reporting period even if there was not any discharge. DMR forms shall be submitted on the 28th day of the month following the previous quarterly reporting period. For example, the three DMR forms for January, February, and March are due on April 28<sup>th</sup>. Duplicate signed copies of these, and all other reports required herein, shall be submitted to EPA at the following addresses, unless otherwise specified in this permit:

U.S. Environmental Protection Agency Region 9  
CWA Compliance Office (WTR-7)  
NPDES/DMR  
75 Hawthorne Street  
San Francisco, CA 94105

#### **PART IV - DEFINITIONS**

- A. A "daily discharge" means the "discharge of a pollutant" measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of

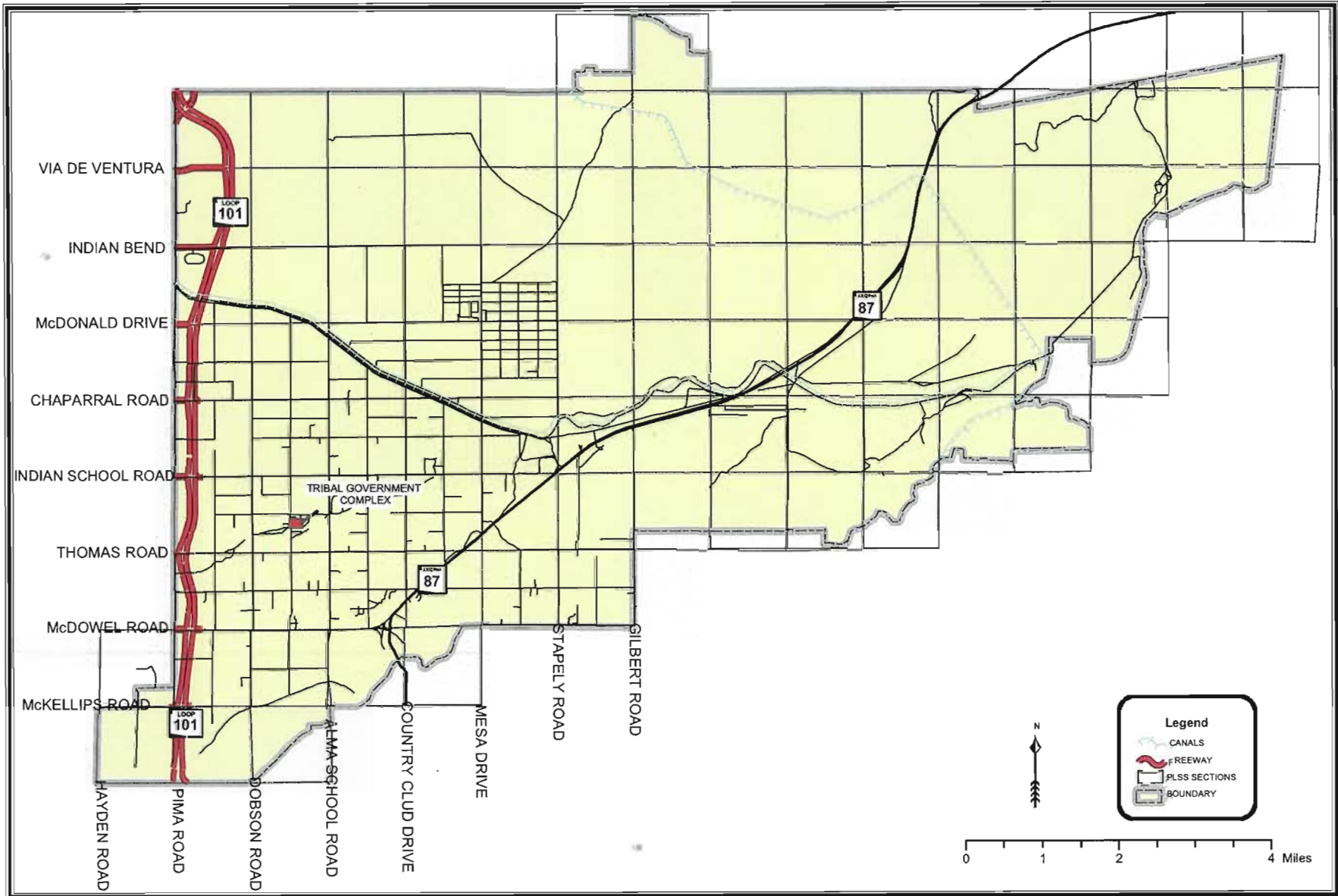
sampling. For pollutants with limitations expressed in units of mass, the “daily discharge” is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the “daily discharge” is calculated as the average measurement of the pollutant over the day.

- B. A “daily maximum allowable effluent limitation” means the highest allowable “daily discharge.”
- C. A “DMR” is a “Discharge Monitoring Report” that is an EPA uniform national form, including any subsequent additions, revisions, or modifications for reporting of self-monitoring results by the permittee.
- D. A “discrete” sample is a single sample collected at a particular time and place that represents the composition of the discharge only at that time and place. Sample collection, preservation, and handling shall be performed as described in the most recent edition of 40 CFR 136.3, Table II. Where collection, preservation, and handling procedures are not outlined in 40 CFR 136.3, procedures outlined in the 20th edition of *Standard Methods for the Examination of Water and Wastewater* shall be used.
- E. The “method detection limit” or “MDL” is the minimum concentration of an analyte that can be detected with 99% confidence that the analyte concentration is greater than zero, as defined by a specific laboratory method in 40 CFR 136. The procedure for determination of a laboratory MDL is in 40 CFR 136, Appendix B.
- F. The “minimum level” or “ML” is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed in a specific analytical procedure, assuming that all the method-specific sample weights, volumes, and processing steps have been followed (as defined in EPA’s draft *National Guidance for the Permitting, Monitoring, and Enforcement of Water Quality-Based Effluent Limitations Set Below Analytical Detection/Quantitative Levels*, March 22, 1994). If a published method-specific ML is not available, then an interim ML shall be calculated. The interim ML is equal to 3.18 times the published method-specific MDL rounded to the nearest multiple of 1, 2, 5, 10, 20, 50, etc. (When neither an ML nor MDL are available under 40 CFR 136, an interim ML should be calculated by multiplying the best estimate of detection by a factor of 3.18; when a range of detection is given, the lower end value of the range of detection should be used to calculate the ML.) At this point in the calculation, a different procedure is used for metals, than non-metals:
  - 1. For metals, due to laboratory calibration practices, calculated MLs may be rounded to the nearest whole number.
  - 2. For non-metals, because analytical instruments are generally calibrated using the ML as the lowest calibration standard, the calculated ML is then rounded to the nearest multiple of  $(1, 2, \text{ or } 5) \times 10^n$ , where  $n$  is zero or an integer. (For example, if an MDL is 2.5 ug/l, then the calculated ML is:  $2.5 \text{ ug/l} \times 3.18 = 7.95 \text{ ug/l}$ . The multiple of (1,

2, or 5) x 10<sup>n</sup> nearest to 7.95 is  $1 \times 10^1 = 10$  ug/l, so the calculated ML, rounded to the nearest whole number, is 10 ug/l.)

- G. "NODI(B)" means that the concentration of the pollutant in a sample is not detected. NODI(B) is reported when a sample result is less than the laboratory's MDL.
- H. A "NODI(Q)" means that the concentration of the pollutant in a sample is detected but not quantified. NODI(Q) is reported when a sample result is greater than or equal to the laboratory's MDL, but less than the ML.

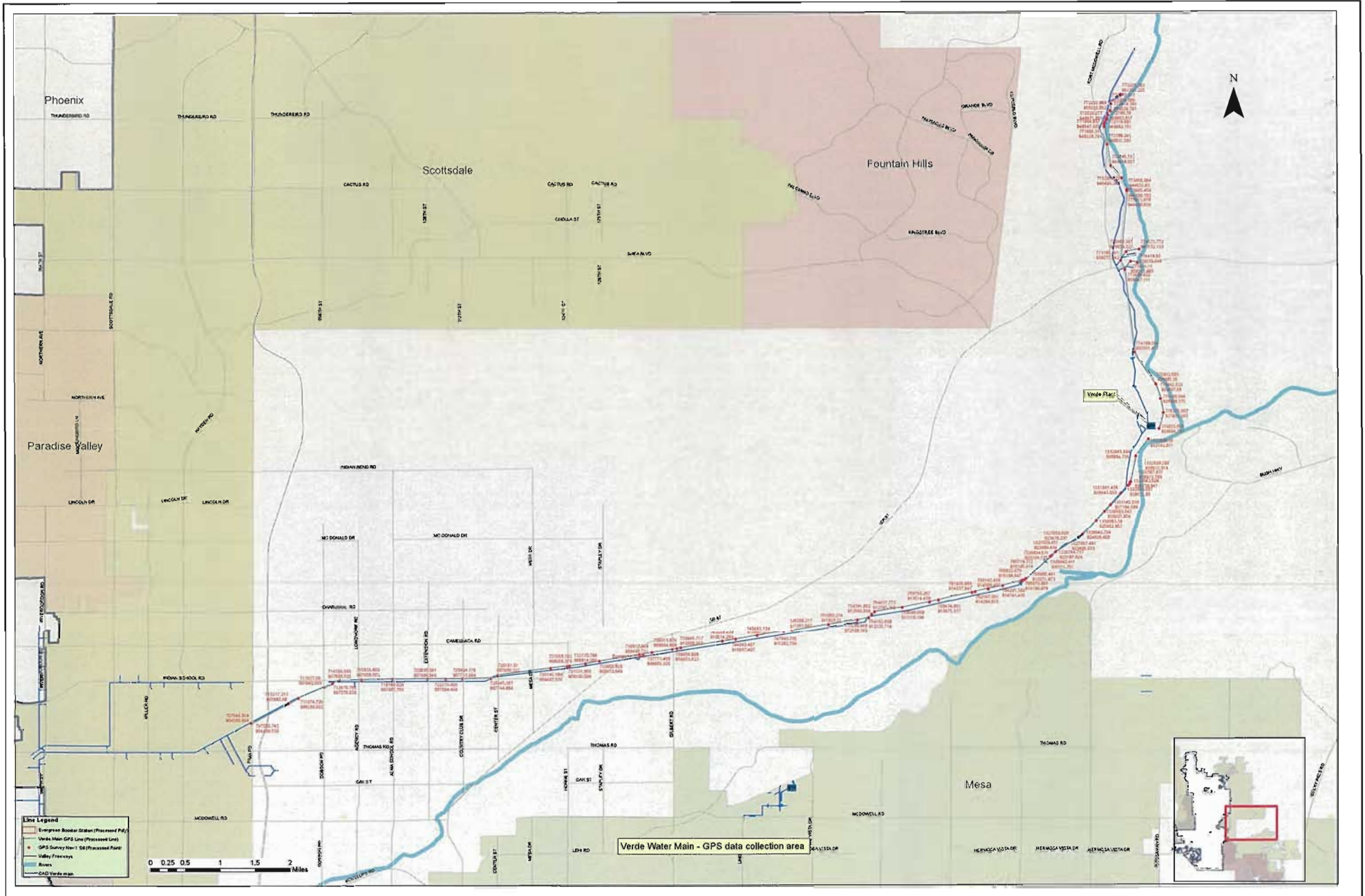
# ATTACHMENT A-1



**SALT RIVER PIMA - MARICOPA INDIAN COMMUNITY**

July 2001  
SOURCE:  
SRP-MIC GIS

# ATTACHMENT A-2



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## VERDE WATER MAIN