

ATTACHMENT 1. AUTHORIZATION AND ELIGIBILITY REQUIREMENTS

✓ **Agricultural Water Management Compliance**

The entities that will receive funding from the proposed grant include the City of Modesto and DPWD (for the inter-regional project). Of these, the only agricultural water supplier that will receive funding from the proposed grant is DPWD. Contact information is as follows:

Del Puerto Water District: Anthea Hansen, General Manager, 209-892-4470,
ahansen@delpuertowd.org

DPWD was a project proponent in both the East Stanislaus and Westside-San Joaquin IRWM Region's 2014 Drought Grant Applications, and therefore is not required to submit agricultural water management compliance documentation. DPWD Agricultural Water Management Plan (AWMP), dated July 5, 2011, was submitted to DWR and has been verified in an October 18, 2013 letter from DWR as addressing the requirements of the California Water Code. Documentation provided in the 2014 Drought Grant Application is provided in Appendix 1.5.

Appendix 1.5 - AWMP Documentation

DEPARTMENT OF WATER RESOURCES

1416 NINTH STREET, P.O. BOX 942836
SACRAMENTO, CA 94236-0001
(916) 653-5791

OCT 23 13
12:44P



October 18, 2013

Ms. Athea Hansen
General Manager
Del Puerto Water District
Post Office Box 1596
Patterson, California 95363-1596

Dear Ms. Hansen:

The Department of Water Resources (DWR) has received your Water Conservation Plan for the purpose of meeting the requirements of Water Code Section 10828. We find that your plan generally meets the requirements of the code section.

DWR's review of plans is limited to assessing whether suppliers have addressed the required legislative elements. In its review, DWR does not evaluate or analyze the supplier's plan data, projections, or water management strategies. This letter is simply meant to acknowledge that the supplier has addressed the Water Code requirements. The results of the review will also be provided to the DWR's Water Use and Efficiency grants program, the Financial Assistance Branch, and other State agencies, as applicable.

If you have any questions regarding the review of your plan, please feel free to contact Marty Berbach at (916) 651-9216 or martin.berbach@water.ca.gov.

Sincerely,

A handwritten signature in black ink that appears to read "Kent Frame".

Kent Frame
Program Manager II
Water Use and Efficiency Branch
Division of Statewide Integrated Water Management



P.O. Box 1596 Patterson, CA 95363-1596

Phone (209) 892-4470 • Fax (209) 892-4469

RESOLUTION
APPROVING AND AUTHORIZING SUBMITTAL OF ADDITIONS TO THE DEL PUERTO WATER DISTRICT'S WATER MANAGEMENT PLAN TO BE SUBMITTED TO THE DEPARTMENT OF WATER RESOURCES TO MEET THE AGRICULTURAL WATER MANAGEMENT PLAN REQUIREMENTS ENACTED BY SBX7

Whereas, the Board of Directors of the Del Puerto Water District (the "Board" and "District" respectively) has previously adopted a USBR approved Water Management Plan ("Plan") for the District, a copy of which is on file with the Secretary hereof; and

Whereas, the Agricultural Water Management Plan Requirements enacted by SBX7-7 require this Plan to be modified by the addition of documentation necessary to meet the Agricultural Water Measurement requirements of California Code of Regulations, Title 23, §597 et seq.; and

Whereas, the Board has reviewed this additional documentation and determined that it meets these requirements; and

Whereas, the Agricultural Water Management Plan Requirements enacted by SBX7-7 also require that this additional documentation along with the approved Plan be submitted to the Department of Water Resources;

NOW, THEREFORE, BE IT RESOLVED AS FOLLOWS:

- Section 1.** The facts stated in the recitals above are true and correct and the Board so finds and determines.
- Section 2.** The Board approves of and adopts said additions to its Water Management Plan.
- Section 3.** The Secretary of the District is hereby authorized and directed to submit said additions in substantially the form presented to the Board, along with the approved Plan, to the Department of Water Resources, said submittal to provide conclusive proof of such approval.

PASSED AND ADOPTED this 19th day of December, 2012 by the Board of Directors of the Del Puerto Water District by the following vote:

AYES: Koster, Bays, Lucich, Escobar, Perez, Dompe and Jasper

NOES: None

ABSENT: None

William D. Harrison, Secretary
DEL PUERTO WATER DISTRICT

I HEREBY CERTIFY that the foregoing is the resolution of said District as duly passed and adopted by the Del Puerto Water District, a public agency formed under the laws of the State of California, at a meeting of the Board of Directors thereof duly called and held at the office of the District on the 19th day of December, 2012.

WITNESS my hand and seal of said Board of Directors this 14th day of January, 2013.


Secretary of the Board of Directors

PROOF OF PUBLICATION
(2015.5 C.C.P)

STATE OF CALIFORNIA
County of Stanislaus

I am a citizen of the United States and a resident of the County aforesaid; I am over the age of eighteen years and not a party to or interested in the above-entitled matter. I am the principal clerk of the printer of the Patterson Irrigator, a newspaper of general circulation, printed and published once a week on Thursdays, in the city of Patterson, California, County of Stanislaus, and which newspaper has been adjudged a newspaper of general circulation by the Superior Court, of the County of Stanislaus, State of California, under the date of June 23, 1952, Case Number 47304; that the notice, of which the annexed is a printed copy (set in type not smaller than nonpareil), has been published in each regular and entire issue of said newspaper and not in any supplement thereof on the following dates, to-wit:

11/29, 12/6

all in the year 2012

I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Dated at Patterson, California, this 6
day of December, 2012

[Signature]
Signature

This space is for the County Clerk's Filing stamp

Proof of Publication of

NOTICE OF Public Hearing

Notice is hereby given that Del Puerto Water District will hold a hearing on Wednesday, December 19, 2012 at 8:30 a.m. to consider comments on proposed additions to its USBR approved Agricultural Water Management Plan. The District is in the process of modifying its USBR Plan which was adopted by the Board of Directors and published by the USBR in the Federal Register on August 31, 2011. The modification will consist of additional documentation required in accordance with California Code of Regulations, Title 23, Section 8897 et seq., Agricultural Water Measurement and will be submitted to the Department of Water Resources along with the existing approved USBR plan in order to meet the Agricultural Water Management Plan Requirements enacted by SBX77. A copy of the USBR approved plan and the State required addenda may be viewed at the District Office, 17840 Ward Ave., Patterson, CA. Written comments submitted prior to the hearing should be directed to: Annea C. Hansen, Del Puerto Water District, P.O. Box 1596, Patterson, CA 95363.

11/29, 12/6

Supporting Documentation for the SBX7-7 Agricultural Water Measurement Regulation (as applicable)

A. Legal Certification and Apportionment Required for Water Measurement

Not Applicable

B. Engineer Certification and Apportionment Required for Water Measurement

Not Applicable

C. Description of Water Measurement Best Professional Practices

The District's Water Measurement Best Professional Practices include four components: irrigation scheduling, volumetric measurement, water meter accuracy, and monthly water use statements provided to customers/water users for each measurement point.

Irrigation Scheduling

Irrigation Scheduling is the procedure in which the customer places a water order with the District. The District's Rules & Regulations for Water Service require that orders be placed one day in advance in order to facilitate unlocking of the gate serving the primary delivery point, more commonly called "Turnout".

Customers requesting an "unlock" are required to provide:

1. The customer/water user name for billing purposes.
2. The numeric milepost of the delivery point/turnout location.
3. Pump number, if applicable.
4. An estimated rate of flow in cubic feet per second (cfs).
5. The desired start time.
6. A current meter reading, if applicable or requested.

Once a turnout is unlocked, the customer operates the gate at the delivery point to regulate the flow of irrigation water to his/her field, thus creating an "on-demand" delivery system. When finished, the customer closes the gate and notifies the District of completion, at which time the turnout is locked until the next irrigation order is received and scheduled.

Volumetric Measurement

All water meters used by the District measure flow in cubic feet per second (cfs) or gallons per minute (gpm). Each meter also totalizes in acre feet (af) of water used.

Water Meter Accuracy

The primary delivery points, or turnouts, where water leaves District facilities are measured by mechanical propeller (primary) meters that meet an accuracy standard of + or - 2%. During the irrigation season, these meters are read weekly, and during the non-irrigation season they are read semi-monthly.

At turnouts where the primary delivery points have multiple customers, secondary meters have been installed downstream of the primary meter to measure each customers' water use separately. The

District routinely calibrates the secondary meters against the primary meter, thereby striving to meet accuracy standards at all times. In certain locations where secondary meters are used, there may be one customer who is without a measuring device. This customers' water use is calculated by subtracting the total measured use of the secondary meter(s) from total use measured by the primary meter. A numeric presentation of this calculation is provided with each month's billing statement and is also available upon request at any time during the billing cycle.

The District also has several turnout locations where multiple customers who share pipeline irrigate one-at-a-time using a rotating delivery schedule. These customers are required to provide their meter reading with each on and off order, thereby facilitating accurate measurement for billing purposes.

Monthly Billing Statements

For purposes of the monthly billing, all water meters are read on the last day of the month and translated into customer water use statements. The District's database tracks irrigated acreage at each turnout location, and crop reports are submitted annually to determine total irrigated acres by crop type. The District strives at all times to utilize best professional practices, using water order information, weekly comparisons between water orders and measured flow readings, and a high level of communication with its customers to achieve quality control and meet quality assurance standards. Customers are reminded that they are welcome to contact the District at any time regarding a question about the accuracy of their water measurement/billing statement.

D. Documentation of Water Measurement Conversion to Volume

Not Applicable

E. Device Corrective Action Plan Required for Water Measurement

Primary delivery points/turnouts have propeller meters that are read, repaired and tested by the San Luis & Delta-Mendota Water Authority (SLDMWA). The SLDMWA is a joint powers agency responsible for maintenance and operation of the United States Bureau of Reclamation (USBR) Delta-Mendota Canal (DMC) which delivers water to the District. As the District does not own or operate any infrastructure, the DMC effectively serves as the District's "Facilities".

SLDMWA employees are trained to follow the standards and procedures for testing and calibrating meters as provided in the USBR's "Water Measurement Manual". An accuracy range of +/- 2% is required and documented by SLDMWA's staff engineer. After a series of tests, meters not falling into that range are adjusted by making necessary gear changes. Testing involves using a pitot tube and manometers. All test results are recorded and documented in the SLDMWA's Asset Management Program. All meters are required to be tested at least once a year. Repeat tests are conducted during the year as time permits, with requests from the District for additional tests given priority should accuracy be questioned. The SLDMWA Primary Meter Testing Protocols are attached as Exhibit E1.

Secondary meters are read, repaired and tested by District personnel. Since 2007, meters purchased by the District have included a certified test report. The calibration on these meters is performed at a primary or secondary volumetric test facility, traceable to the National Institute of Standards and Technology, USA. The estimated margin for error at these calibration facilities is +/- 0.5%. Once the secondary meter is installed in the field, volumetric accuracy is verified by instantaneous flow rates taken and compared against the instantaneous flow rate of the primary meter at a time when only one secondary meter is operating downstream of a primary meter. Meters not falling into an accuracy range of +/- 6% are adjusted by making necessary gear changes after a series of tests show a consistent discrepancy. All secondary meters are routinely tested for accuracy and the testing results are documented in the District's records. The District's Secondary Meter Testing Protocols are attached as Exhibit E2.

F. Documentation Required for Loan and Grant Eligibility

Schedule to Implement EWMPs (Water Code; §10608.56 (d))				
EWMP	Implementation Schedule	Finance Plan	Budget Allotment	USBR BMPs
Critical				
1 - Water Measurement	Completed-upgrades to be installed as needed	Per-acre assessment	\$6,000	Critical 1
2 - Volume-Based Pricing	Completed	N/A	N/A	Critical 4
Conditional				
1 - Alternate Land Use	Ongoing	N/A	N/A	Exemptible 1
2 - Recycled Water Use	Ongoing	Per-acre assessment	\$25,000	Exemptible 2
3 - On-Farm Irrigation Capital Improvements	Ongoing	SWRCB ADLP Loan Funding	\$500,000	Exemptible 3
4 - Incentive Pricing Structure	Not applicable-Occurs by default	N/A	N/A	Exemptible 4
5 - Infrastructure	Not applicable-The District has no pipelines, canals or regulatory reservoirs	N/A	N/A	Exemptible 5a Exemptible 5b
6 - Order/Delivery Flexibility	Ongoing	Per-acre assessment	N/A	Exemptible 6
7 - Supplier Spill and Tailwater Systems	Not applicable-The District has no operational spills	N/A	N/A	Exemptible 7
8 - Conjunctive Use	Not applicable-There are no groundwater recharge basins known to be available within the District, and the District has no wells	N/A	N/A	Exemptible 9
9 - Automated Canal Controls	Not applicable-The District does not operate or maintain a delivery system	N/A	N/A	Exemptible 10
10 - Customer Pump Test/Eval.	Ongoing	Per-acre assessment	N/A	Exemptible 11
11 - Water Conservation Coordinator	Ongoing	Per-acre assessment	N/A	Critical 2
12 - Water Management Services to Customers	Ongoing	Per-acre assessment	N/A	Critical 3
13 - Identify Institutional Changes	Ongoing	Per-acre assessment	N/A	No equivalent - Used Critical 5 Policy Evaluation
14 - Supplier Pump Improved Efficiency	Not applicable-The District has no pumps	N/A	N/A	Critical 6
Grand Total all EWMPs	-	-	\$531,000	

Other Documents (as applicable)

Exhibit E1 – San Luis & Delta-Mendota Water Authority (SLDMWA) Primary Meter Testing Protocols

Exhibit E2 – District Secondary Meter Testing Protocols

San Luis & Delta Mendota Water Authority Primary Meter Testing Protocols

Meters are read once a week during the peak season and twice a month in the off season. Meters are also read on the last working day of the month or as close as possible. All Canal Operations employees may be called upon to read meters. DMC meters are divided into the upper, middle, and lower sections and are read by Operations personnel as scheduled (Exhibits 10, 10A, and 11). The Mendota Pool meters are read by the Mendota Pool Hydrotech (Exhibits 13 and 14). Rotation of personnel reading meters are made as much as possible. Meter readings are recorded and transmitted to the Watermaster by radio or fax upon completion where they are entered into the upper and lower end books for accounting purposes. During the readings, turnouts found to be off and unlocked are called in to the Watermaster. If the water order is old, usually over 3 days, the turnout will be locked up as directed by the Watermaster. This is done in an attempt to account for daily use on the canal. Several turnouts remain unlocked due to operational reasons and are indicated as such on the meter sheet. Meters found not to be working properly are reported to the Hydrotech. Once the meter is repaired, a meter timing and reading is given to the Watermaster, to allow use adjustments to be made.

Meters are periodically removed; cleaned, greased and worn parts are replaced as needed. Once all meters on the system have been serviced, the repairman starts a new cycle. Repairmen jointly work large meters, requiring the use of a boom truck for removal, once a year. All meters are serviced at least once a year. Gear changes are made to meters when tests show a constant discrepancy of over + or - 2% of accuracy. Each winter, all meters are removed, overhauled and given a fresh coat of paint. The Assistant Watermaster orders all needed parts for this winter work based on input from the Hydrotechs. All meter work performed and parts used are documented in the Authorities Asset Management Program.

Employees are trained and follow the standards and procedures for testing as provided in the USBR's "Water Measurement Manual". An accuracy range of + or - 2% is required. Meters not falling into that range are adjusted by making necessary gear changes after a series of tests show a constant discrepancy. Meters at DMC turnouts and wells are tested using a pitot tube and manometers. Current meter measurements are performed using standard current meter or Marsh McBirney type. Monthly current meter measurements are conducted at Milepost 4.98. Biweekly current meter measurements are conducted at Milepost 116.44 (when flows exceed 1000 cfs). Tests at the DMC closed drain pumps (Exhibit 39) are conducted twice a year. Pitot tube test results are recorded on a form (Exhibit 40) and are documented in the Authority's Asset Management Program.

All meters at each turnout on the DMC and Mendota Pool are required to be tested at least once a year. Ground water measurements are currently conducted quarterly. The DMC drain pumps are tested twice a year. Users requesting individual tests are given priority should they feel meters are inaccurate. Some turnouts seldom operate causing difficulties in obtaining tests. Repeat tests should be conducted during the year as time permits on an on-going basis.



PUMP TEST

TEST DATA

Date: _____ Time: _____ am/pm Party: _____

Owner: _____ District: _____

Location: _____

Pump Make: _____ Type: _____ Size: _____

Test By Pitot Tube _____ Simplex _____

Summary

C.F.S. Test _____ G.P.M. _____

C.F.S. Meter _____ Departure _____ %

H.P. Input _____ H.P. Output _____

Meter Reading: _____

Pilot Tube No: _____ Tube No: _____

L.B. Dia. _____ R.B. Dia. _____

Dist _____ Diff _____ Vel _____

1 _____

2 _____

3 _____

4 _____

5 _____

6 _____

7 _____

8 _____

9 _____

10 _____

Start: _____ End: _____ Mean: _____ C.F.S. _____

1 c.c. _____

Name: _____ Title: _____

Signature: _____ Checked: _____

Total _____ Total _____

Mean Vel: _____ Mean Vel: _____

Mean Dia: _____ Area Sq. Ft: _____ Mean Vel: _____

Remarks: _____

Must be in ink

EXHIBIT 40

Del Puerto Water District Secondary Meter Testing Protocols

For District-owned secondary meters, volumetric accuracy is verified by District personnel through a process that compares the instantaneous flow rates at the secondary meter against the instantaneous flow rate of the primary meter at a time when only one secondary meter is operating downstream of a primary meter. Meters not falling into an accuracy range of $\pm 6\%$ are adjusted by making necessary gear changes to the secondary meter after a series of tests show a consistent discrepancy. All secondary meters are routinely tested for accuracy and the testing results are documented in the District's records. The protocol is as follows:

Conditions Required:

- A full pipeline of water between the primary and secondary meter.
- No change in flow while checking calibration.
- Only one secondary meter may be operating at the time of calibration.
- Both the primary meter and the secondary meter must be tested at the same site visit. The order of the testing does not matter.

Test Procedures:

Step 1: Operate the delivery system until a stabilized flow in the pipe is obtained.

Step 2: Record time for (1) revolution of the sweep hand on the totalizer (in seconds).

Step 3: Divide 43,560 cu. ft. by the result from Step 2.

Step 4: Multiply the result from Step 3 by .001 for a meter that measures in thousandths (4-place meter) and .01 for a meter that measures in hundredths (3-place meter). This calculates the instantaneous flow rate in cubic feet per second (cfs). Record calculated flow on the Flow Monitoring, Testing and Maintenance Sheet for the location being tested (Sample Attached).

Step 5: Repeat steps 1 through 4 a minimum of three times for both the primary meter and the secondary meter. Average each set of results separately.

Step 6: If the results from Step 5 indicate a difference of $\pm 6\%$ between the two meters, a gear change is made to the secondary meter. Once the gear change is made, the testing procedure is repeated to validate the gear change.

Flow Monitoring, Testing & Maintenance Sheet

TURNOUT LOCATION:
 LANDOWNER:
 WATER USER:

METER SERIAL #:
 PIPE ID:
 OTHER INFO: 4 Place Meter

(A)				(B)			CORRECTION FACTOR	COMMENTS
DATE	METER READING	TEST #:	REVOLUTION (in seconds)	TEST PROCEDURE STEPS 2 AND 3	PRIMARY METER FLOW (in cfs)	REVOLUTION (in seconds)		
		1		± 43,560 * .001			± 43,560 * .001	
		2		± 43,560 * .001			± 43,560 * .001	
		3		± 43,560 * .001			± 43,560 * .001	
					Average			Average
		1		± 43,560 * .001			± 43,560 * .001	
		2		± 43,560 * .001			± 43,560 * .001	
		3		± 43,560 * .001			± 43,560 * .001	
					Average			Average
		1		± 43,560 * .001			± 43,560 * .001	
		2		± 43,560 * .001			± 43,560 * .001	
		3		± 43,560 * .001			± 43,560 * .001	
					Average			Average
		1		± 43,560 * .001			± 43,560 * .001	
		2		± 43,560 * .001			± 43,560 * .001	
		3		± 43,560 * .001			± 43,560 * .001	
					Average			Average
		1		± 43,560 * .001			± 43,560 * .001	
		2		± 43,560 * .001			± 43,560 * .001	
		3		± 43,560 * .001			± 43,560 * .001	
					Average			Average

SUMMERS ENGINEERING, INC.

CONSULTING ENGINEERS

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HANFORD, CALIFORNIA 93232-1122

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(559) 582-7632

December 17, 2012

John Hansen
Del Puerto Water District
PO Box 1596
Patterson, CA 95363-1596

Patterson, California

SUBJECT: Water Measurement Certification

Dear John,

At the request of Del Puerto Water District, Summers Engineering has reviewed the District's report titled "Del Puerto Water District December 2012 Supporting Documentation for the SBX7-7 Agricultural Water Measurement Regulation" which summarizes their water measurement practices and water meter accuracy testing protocol. The District obtains its water supply from the Delta Mendota Canal. They utilize as "primary meters", the meters operated and maintained by the San Luis & Delta Mendota Water Authority under their contract for operation of the Delta Mendota Canal for the United States Bureau of Reclamation (USBR). All "primary meters" are tested for accuracy annually utilizing the standards and procedures for testing as listed in the USBR's "Water Measurement Manual". Some "primary meters" deliver water through pipelines which have multiple customers. The District has "secondary meters" installed downstream of the "primary meters" to measure each customer's water use. The report describes the District's "Secondary Meter Testing Protocols" which are routinely tested for accuracy and documented in District records. The measuring accuracy is verified by comparing instantaneous flow rates at the "secondary meters" to the flow measurements of the "primary meters".

In accordance with Section 597.4 of the recently adopted Agricultural Water Measurement regulations, Summers Engineering has reviewed the District report and confirms the practices outlined are capable of providing flow measurements with an acceptable level of accuracy.

Please contact me if you have any questions.

Very truly yours,


Roger L. Reynolds
RCE 28198

California State Regulation on Agricultural Water Measurement and Applicability to Federal Water Contractors

California Senate Bill x 7-7 (Bill) was enacted in November 2009. The Bill required that on or before July 31, 2012, agricultural water suppliers shall measure the volume of water delivered to customers. As a result, the California Department of Water Resources (DWR) will adopt regulations that provide for a range of options that agricultural water suppliers may use to comply with the measurement requirement.

On July 12, 2011, DWR submitted to the Office of Administrative Law (OAL) a Certificate of Compliance, following the Emergency rulemaking file #2011-0624-01E, to start a regular rulemaking process for the adoption of a permanent agricultural water measurement regulation.

On November 16, 2011, the California Water Commission approved California Code of Regulations Title 23, Waters Division 2, Department of Water Resources Chapter 5.1, Water Conservation Act of 2009 Article 2, Agricultural Water Measurement to send to the Office of Administrative Law (OAL) for approval. If approved by OAL, Section 597(i) of the subject regulation states:

An agricultural water supplier subject to Central Valley Project Improvement Act (CVPIA) (Public Law 102-575) or the Reclamation Reform Act (RRA) of 1982 shall be deemed in compliance with this article if all irrigation water delivered by that water supplier to each customer is delivered through measurement devices that meet the United States Bureau of Reclamation accuracy standards defined in Reclamation's Conservation and Efficiency Criteria Standards of 2008.

Reclamation's Conservation and Efficiency Criteria Standards of 2008 classifies agricultural water measurement as a critical BMP and is as follows:

Measure the volume of water delivered by the Contractor to each customer, except Class II water. Measure flows with devices that are operated and maintained to a reasonable degree of accuracy, under most conditions, to +/- 6 percent by volume. Three typical categories of measurement devices are: Devices with totalizers, standard flow measurement devices, and non-standard but calibrated devices.

The first category includes devices with totalizers that measure volume: Propeller meters, Venturi meters, magnetic meters, and acoustic meters. These have a high level of accuracy with proper installation and periodic maintenance and calibration. This category also includes calibrated pumps when the suction side water level fluctuation is small when compared to the lift (+/- 6 percent) and the discharge pressure is not changed.

The second category includes standard flow measurement devices that measure flow rate and also require accurate measurements of water level and delivery time to determine volumes: Replogle and Parshall flumes; rectangular, trapezoidal (Cipolletti) and V-Notch weirs; and canal meter gates. These devices require proper installation, continuous or sufficiently frequent recording of water levels and flow rates, delivery beginning and ending times, adjustments for approach velocity in some cases, and regular maintenance and calibration for good accuracy.

The third category includes non-standard, calibrated flow measurement devices. This category includes special measurement devices developed by a District. Typically, there are no published standard dimensions or flow tables for such devices. Consistent dimensions and installations; accurate determination of delivery time; local calibration and a verification of accuracy, based on a representative sample number of devices measured over time; and a proposed schedule for maintenance and calibration would be necessary for acceptability. This category also includes calibrated pumps when the suction side water level fluctuation is small when compared to the lift (+/- 6 percent) and the discharge pressure is not changed.

Rough estimates or instantaneous measurements of flow rate or volume are **not** acceptable since such measurements do not provide a documented reasonable degree of accuracy. Examples are, flow rate estimates at check structures, the sum of the flow in siphon tubes, the use of occasional flow readings and multiplying by the time between readings, or other methods of measurement not specified here.

For a copy of Reclamation's Conservation and Efficiency Criteria Standards of 2008, please contact Ms. Sheri Looper at slooper@usbr.gov.