# SWEETWATER SPRINGS WATER DISTRICT

**TO:** Board of Directors **AGENDA NO. VI**

**FROM:** Steve Mack, General Manager

**Meeting Date: January 5, 2017**

**Subject: GENERAL MANAGER'S REPORT**

**RECOMMENDED ACTION:** Receive report from the General Manager.

**FISCAL IMPACT:** None

**DISCUSSION:**

1. **Water Production and Sales:** Water sales in November were 18,070 units (41.5 AF, Guerneville cycle) and production was 44.9 AF. Compared to one year ago, sales and production were lower (47.8 AF and 47.9 AF, respectively). The water lost percentage is up some (21.0) and remains at historically low levels. The reduction from November 2013, the State Board standard, was 24.0%. GPCD for November was 51.8. Figure 1 shows sales, production and % difference since 2008.

2. **Leaks:** In November we had 9 total leaks and spent 83 man-hours on them. Those are more leaks and man-hours compared to the prior month and the same number of leaks and man-hours compared to November one year ago. Figure 2 shows service and main leaks separately with a total breaks line as well. The District continues to be at historic lows for this.

3. **Guerneville Rainfall:** The rainy season continues to do well but not too well. Rainfall is a bit above the near-term average and below the long-term average. The mid December rains brought the River above 27 feet but comfortably below flood stage. Two years ago we had more rain at this time (25" compared to 19") but it mostly stopped raining after the new year; let's hope a more moderate winter-spring this year.

4. **River Lane Property Sale**: Nothing to report for December; we are expecting movement after the New Year.

5. **El Bonita Flooding Plan**: The plates for the well vaults at El Bonita are being installed this week and we hope finished prior to the Board meeting. This has turned out to be a more difficult and slower effort than we expected, but it's getting done. We dodged a flood event in mid December; we were expecting this project to be done much sooner in the year.

6. **2017 CIP:** We are expecting this project to be advertised this month.

7. **TAP Training:** Staff (me, Julie and Kevin) had online training on how to properly do the AWWA Water Audit reporting that is now required by the State. Most of the training involved proper evaluation of the data we use for the water audit report. We are being down-graded because we don't do annual production meter calibrations, we don't have an annual residential meter replacement, and we don't have 3rd party review of financial information. Our final data validity score was 58 (out of 100). We don't know where that

score ranks with other water utilities. It was an interesting discussion - AWWA gives higher ranks for activities more easily done by larger utilities and does not give credit for the "eyes on facilities" abilities of smaller utilities like us. The data validity score doesn't mean anything in itself - there is no "passing grade" (yet). On other performance indicators, the District is in the middle of the pack.

It will be interesting to see if the State requires some passing grade in the future. This water audit is compared to the required financial audit, but the State does not grade our financial audit; it's a disclosure document and it is up to the governing board and the general public to evaluate the financial audit. If the water audit is treated the same, it will be a useful annual exercise.

8. **Toilet Rebate/Direct Install Program:** There was one toilet rebate reported for December.

9. **In-House Construction Projects:** Two in-house projects were completed in December: replaced 140 ft of 2 inch line and a 1 inch service on Orchard Rd., Guerneville (66 man-hours) and repaired failed saddle on Hidden Valley Rd., Guerneville (34 man-hours).

10. **Gantt Chart:** January is the start of the annual budget process; a short item on the agenda. Next month shows the comment letter due on the draft water rights DEIR and that's on this agenda.

**Figure 1. Water Production and Sales 12 Month Moving Averages**
**Sweetwater Springs Water District Since September 2008**

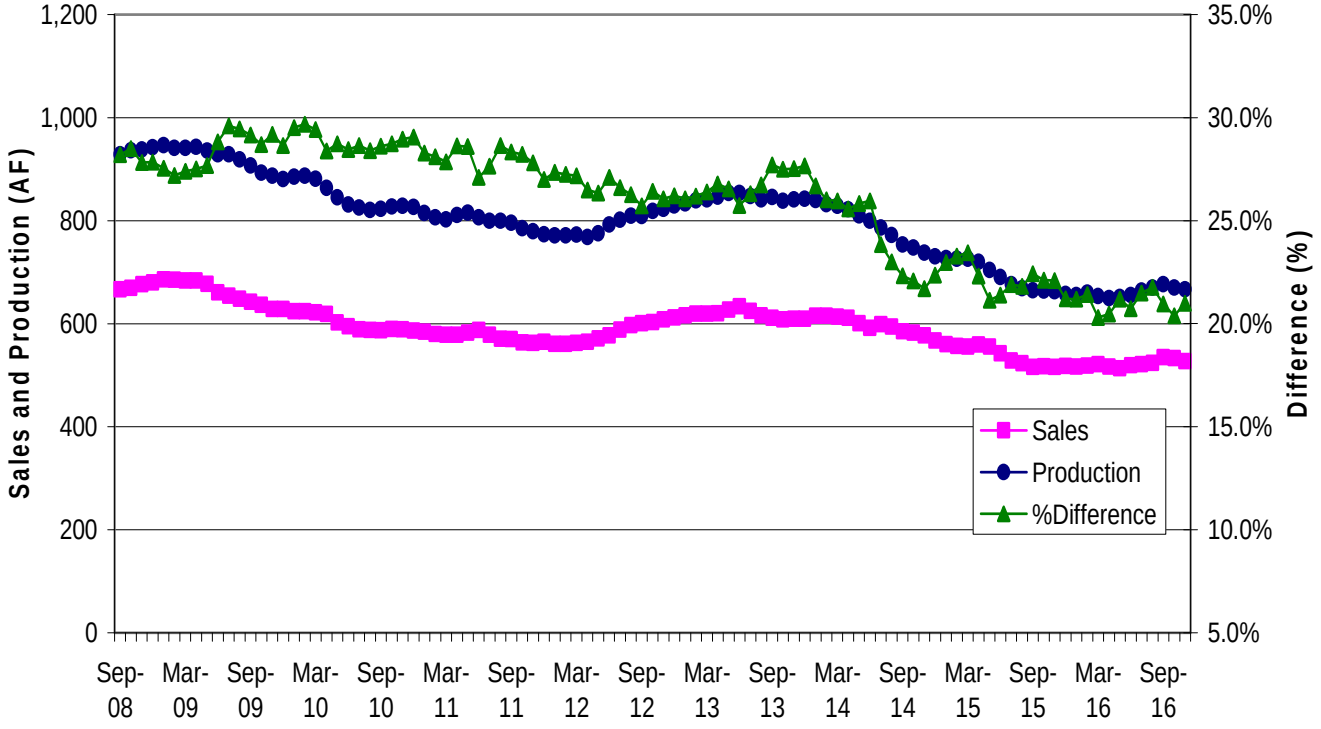


**Figure 2. Sweetwater Springs Water District Main and Service Pipeline Breaks**
**Moving Annual Average Since September 2008**

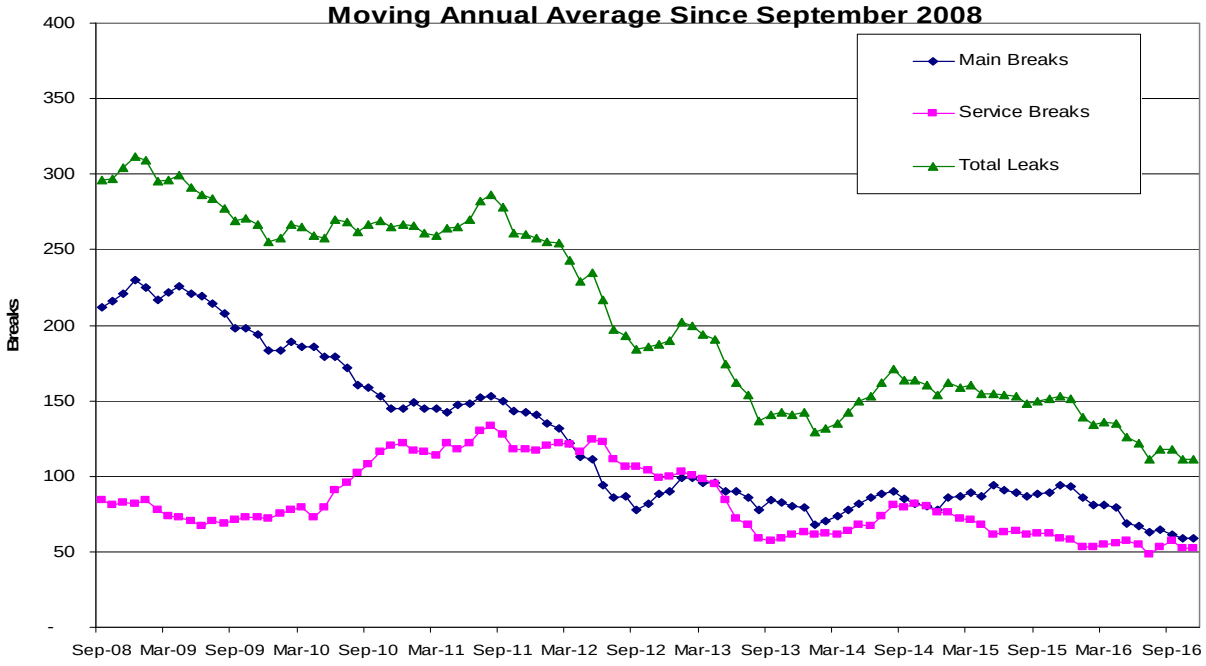
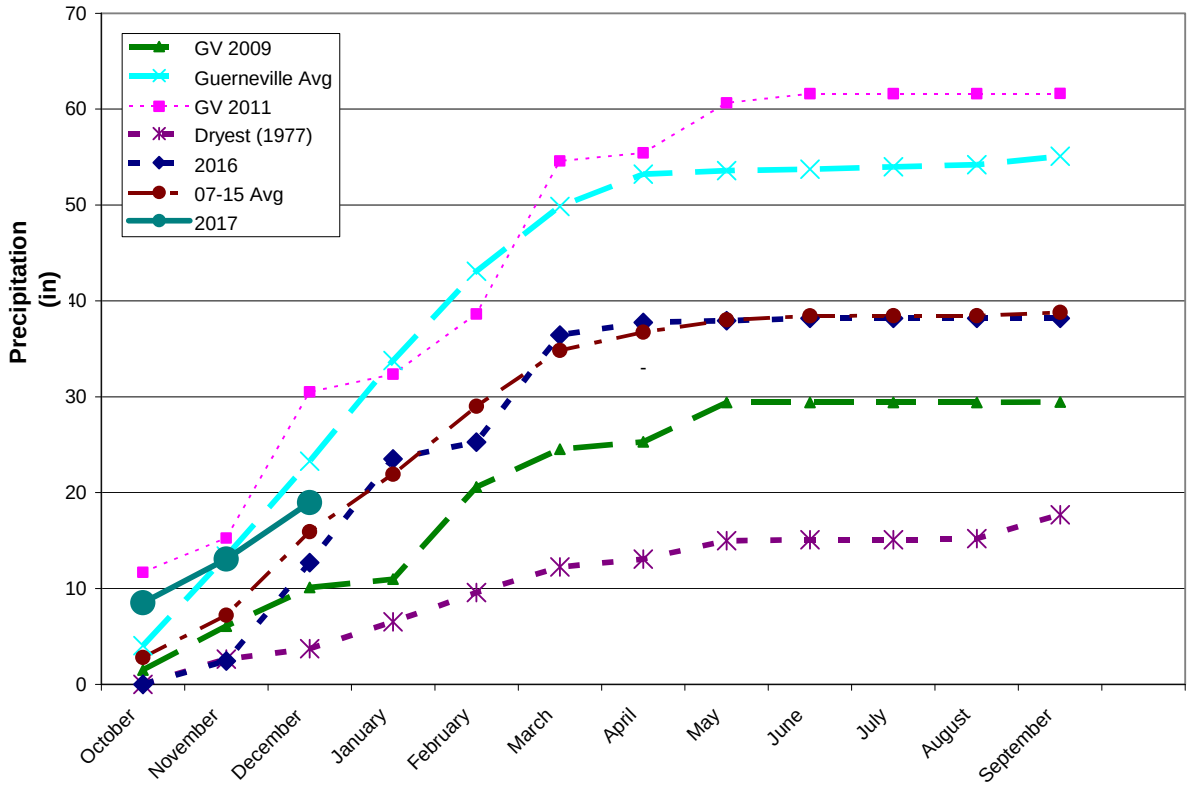



**Figure 3. Guerneville Cumulative Monthly Rainfall**



| Figure 4. Sweetwater Springs WD Calendar Gantt Chart | | Jan-16 | Feb-16 | Mar-16 | Apr-16 | May-16 | Jun-16 | Jul-16 | Aug-16 | Sep-16 | Oct-16 | Nov-16 | Dec-16 | Jan-17 | Feb-17 | Mar-17 | Apr-17 | May-17 | Jun-17 | Jul-17 | FY18+ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Ongoing Activity** | | | | | | | | | | | | | | | | | | | | | |
| **Board Action** | | | | | | | | | | | | | | | | | | | | | |
| **Other Milestone** | | | | | | | | | | | | | | | | | | | | | |
| **Current Month** | | | | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | | | | |
| **By Activity** | | | | | | | | | | | | | | | | | | | | | |
| Action Item/Milestone | **Projected Completion / Milestone Date** | | | | | | | | | | | | | | | | | | | | |
| Crystal Communications Lease | | | | | | | | | | | | | | | | | | | | | |
| 2014-15 Budget Preparation | | | | | | | | | | | | | | | | | | | | | |
| • Capital Improvement Program Board Discussion | | | | | | | | | | | | | | | | | | | | | |
| • Staff Budget Preparation Begins | | | | | | | | | | | | | | | | | | | | | |
| • Ad Hoc Budget Committee Reviews Draft Budget | | | | | | | | | | | | | | | | | | | | | |
| • Draft Budget to Board for Discussion/Action | | | | | | | | | | | | | | | | | | | | | |
| • Approve Budget | | | | | | | | | | | | | | | | | | | | | |
| Capital Projects | | | | | | | | | | | | | | | | | | | | | |
| • Update/Review District CIP | | | | | | | | | | | | | | | | | | | | | |
| • 2017 CIP Design | | | | | | | | | | | | | | | | | | | | | |
| • 2017 CIP Award of Contract | | | | | | | | | | | | | | | | | | | | | |
| • 2017 CIP Construction Starts | | | | | | | | | | | | | | | | | | | | | |
| Urban Water Management Plan | Oct-16 | | | | | | | | | | | | | | | | | | | | |
| Water Rights | SCWA Protest | | | | | | | | | | | | | | | | | | | | |
| Emergency Response Plan Review | | | | | | | | | | | | | | | | | | | | | |
| Building Lease | | | | | | | | | | | | | | | | | | | | | |
| • Lease Renewal | August-17 | | | | | | | | | | | | | | | | | | | | |
| Policies and Procedures | | | | | | | | | | | | | | | | | | | | | |
| • Other Policy | | | | | | | | | | | | | | | | | | | | | |
| • Overall Review | | | | | | | | | | | | | | | | | | | | | |
| Board and General Manager Annual Review | | | | | | | | | | | | | | | | | | | | | |

# AWWA Free Water Audit Software:
## Reporting Worksheet

WAS v5.0
American Water Works Association.
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? Click to access definition
+ Click to add a comment

**Water Audit Report for:** Sweetwater Springs Water District (4910004/0028)
**Reporting Year:** 2015 | 1/2015 - 12/2015

Please enter data in the white cells below. Where available, metered values should be used; if metered values are unavailable please estimate a value. Indicate your confidence in the accuracy of the input data by grading each component (n/a or 1-10) using the drop-down list to the left of the input cell. Hover the mouse over the cell to obtain a description of the grades

**All volumes to be entered as: ACRE-FEET PER YEAR**

To select the correct data grading for each input, determine the highest grade where the utility meets or exceeds all criteria for that grade and all grades below it.

<---------- Enter grading in column 'E' and 'J' ---------->

Master Meter and Supply Error Adjustments

### WATER SUPPLIED

| | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | Pcnt: | Value: | |
| Volume from own sources: | + ? | 5 | 658.000 | acre-ft/yr | + ? | 7 | | | acre-ft/yr |
| Water imported: | + ? | | | acre-ft/yr | + ? | | | | acre-ft/yr |
| Water exported: | + ? | | | acre-ft/yr | + ? | | | | acre-ft/yr |

Enter negative % or value for under-registration
Enter positive % or value for over-registration

**WATER SUPPLIED:** 658.000 acre-ft/yr

### AUTHORIZED CONSUMPTION

Click here: ? for help using option buttons below

| | | | | | Pcnt: | Value: | |
|---|---|---|---|---|---|---|---|
| Billed metered: | + ? | 5 | 518.000 | acre-ft/yr | | | |
| Billed unmetered: | + ? | | | acre-ft/yr | | | |
| Unbilled metered: | + ? | | | acre-ft/yr | | | |
| Unbilled unmetered: | + ? | 5 | 1.625 | acre-ft/yr | | 1.625 | acre-ft/yr |

Use buttons to select percentage of water supplied **OR** value

**AUTHORIZED CONSUMPTION:** ? 519.625 acre-ft/yr

### WATER LOSSES (Water Supplied - Authorized Consumption)

138.375 acre-ft/yr

**Apparent Losses**

| | | | | | Pcnt: | Value: | |
|---|---|---|---|---|---|---|---|
| Unauthorized consumption: | + ? | | 1.645 | acre-ft/yr | | | acre-ft/yr |

**Enter a positive value, otherwise a default percentage of 0.25% is applied and a grading of 5 is applied but not displayed**

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| Customer metering inaccuracies: | + ? | 3 | 10.571 | acre-ft/yr | 2.00% | | acre-ft/yr |
| Systematic data handling errors: | + ? | | 1.295 | acre-ft/yr | 0.25% | | acre-ft/yr |

**Default option selected for Systematic data handling errors - a grading of 5 is applied but not displayed**

**Apparent Losses:** ? 13.511 acre-ft/yr

**Real Losses (Current Annual Real Losses or CARL)**

**Real Losses = Water Losses - Apparent Losses:** ? 124.864 acre-ft/yr

**WATER LOSSES:** 138.375 acre-ft/yr

### NON-REVENUE WATER

**NON-REVENUE WATER:** ? 140.000 acre-ft/yr

= Water Losses + Unbilled Metered + Unbilled Unmetered

### SYSTEM DATA

| | | | | |
|---|---|---|---|---|
| Length of mains: | + ? | 10 | 65.0 | miles |
| Number of active AND inactive service connections: | + ? | 8 | 3,800 | |
| Service connection density: | ? | | 58 | conn./mile main |

Are customer meters typically located at the curbstop or property line? Yes

Average length of customer service line: + ? (length of service line, beyond the property boundary, that is the responsibility of the utility)

**Average length of customer service line has been set to zero and a data grading score of 10 has been applied**

Average operating pressure: + ? 5 75.0 psi

### COST DATA

| | | | | | |
|---|---|---|---|---|---|
| Total annual cost of operating water system: | + ? | 10 | $3,795,000 | $/Year | |
| Customer retail unit cost (applied to Apparent Losses): | + ? | 10 | $2.73 | $/100 cubic feet (ccf) | |
| Variable production cost (applied to Real Losses): | + ? | 5 | $300.00 | $/acre-ft | ☐ Use Customer Retail Unit Cost to value real losses |

WATER AUDIT DATA VALIDITY SCORE:

*** YOUR SCORE IS: 59 out of 100 ***

A weighted scale for the components of consumption and water loss is included in the calculation of the Water Audit Data Validity Score

PRIORITY AREAS FOR ATTENTION:

Based on the information provided, audit accuracy can be improved by addressing the following components:

1: Volume from own sources
2: Customer metering inaccuracies
3: Billed metered

# AWWA Free Water Audit Software:
## System Attributes and Performance Indicators

WAS v5.0
American Water Works Association.
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Water Audit Report for: Sweetwater Springs Water District (4910004/0028)
Reporting Year: 2015 | 1/2015 - 12/2015

*** YOUR WATER AUDIT DATA VALIDITY SCORE IS: 59 out of 100 ***

### System Attributes:

| | | | |
|---|---|---|---|
| | Apparent Losses: | 13.511 | acre-ft/yr |
| + | Real Losses: | 124.864 | acre-ft/yr |
| = | Water Losses: | 138.375 | acre-ft/yr |
| ? | Unavoidable Annual Real Losses (UARL): | 77.43 | acre-ft/yr |
| | Annual cost of Apparent Losses: | $16,065 | |
| | Annual cost of Real Losses: | $37,459 | Valued at Variable Production Cost |

Return to Reporting Worksheet to change this assumpiton

### Performance Indicators:

| | | | |
|---|---|---|---|
| Financial: | Non-revenue water as percent by volume of Water Supplied: | 21.3% | |
| | Non-revenue water as percent by cost of operating system: | 1.4% | Real Losses valued at Variable Production Cost |
| Operational Efficiency: | Apparent Losses per service connection per day: | 3.17 | gallons/connection/day |
| | Real Losses per service connection per day: | 29.33 | gallons/connection/day |
| | Real Losses per length of main per day*: | N/A | |
| | Real Losses per service connection per day per psi pressure: | 0.39 | gallons/connection/day/psi |

| | | | |
|---|---|---|---|
| | From Above, Real Losses = Current Annual Real Losses (CARL): | 124.86 | acre-feet/year |
| ? | Infrastructure Leakage Index (ILI) [CARL/UARL]: | 1.61 | |

* This performance indicator applies for systems with a low service connection density of less than 32 service connections/mile of pipeline