

**Safe Drinking Water Commission  
Meeting**

**July 12, 2016**

**Department of Natural Resources  
Bennett Springs Conference Room  
1730 East Elm Street  
Jefferson City, Missouri**



**SAFE DRINKING WATER COMMISSION**

**Water Protection Program  
Public Drinking Water Branch  
Bennett Springs Conference Room  
1730 East Elm St.  
Jefferson City, Missouri 65101**

**Agenda  
July 12, 2016  
10:00 a.m.**

People with disabilities requiring special services or accommodations to participate in this meeting may make arrangements by calling 573-751-0124 or by writing to Jessica Becklenberg, Commission Secretary, at PO Box 176, Jefferson City, MO 65102-0176. Notification must be received at least five days in advance of the meeting date. Missouri Relay number, 800-735-2966 is available for the hearing impaired.

**Open Session Agenda**

10 a.m.

**1. Call to Order**

Introduction of Commission members, Department staff and audience members.

**2. Approval of the April 6, 2016, open session minutes**

**Recommended Action:** The Commission will amend, if necessary, and approve minutes of the previous meetings.

**3. Drinking Water State Revolving Fund Intended Use Plan Fiscal Year 2016**

**Comprehensive List and Fundable Projects List Revisions**

Darleen Groner, P.E., Financial Assistance Center

**Recommended Action:** The Department recommends the Commission approve changes to the Fiscal Year 2016 Comprehensive List and Fundable Projects List Drinking Water State Revolving Fund as follows:

- Approve the increased project amount for the Village of Sunrise Beach's Phase I project on the Very Small Community 20% Reserve Fundable List from \$1,153,790 to \$1,179,494, the revised funding allocation is \$314,151 in loan and \$865,343 in grant funds.
- Approve moving the Village of Sunrise Beach's Phase II project from the Fundable Contingency List to the Very Small Community 20% Reserve Fundable List for \$473,700 in loan only. The project meets the readiness to proceed criteria.

- Remove Jefferson County PWS #2's project from the General Community 65% Reserve Fundable List. The system requested to withdraw from the program.

**4. Backflow Prevention**

Brandon Bach, Public Drinking Water Branch

**Recommended Action:** Information only.

**5. State Water Plan Update**

Andrea Collier, P.E., Water Resource Center

**Recommended Action:** Information only.

**6. Legislation/Regulatory Update**

Sheri Fry, Public Drinking Water Branch

**Recommended Action:** Information only.

**7. 1<sup>st</sup> Quarter Stage 2 Disinfectants/Disinfection By-Products**

Eric Medlock, Public Drinking Water Branch

**Recommended Action:** Information only

**8. Annual Compliance Report**

Misty Lange, Public Drinking Water Branch

**Recommended Action:** Information only

**9. Attorney General Office Legal Update**

Elliott Usher

**Recommended Action:** Information only

**10. Branch Chief's Updates**

David J. Lamb, Public Drinking Water Branch

**Recommended Action:** Information only

- 11. Other Business**—This routine agenda item provides the Commission opportunity to discuss last minute, minor issues arising after the agenda has been finalized.

**Recommended Action:** Information only

- 12. Public Comment and Correspondence**—This routine agenda item provides an opportunity for the public to comment on any issues pertinent to the Commission's roles and responsibilities. The Commission encourages all interested parties to express their comments and concerns.

13. **Future Meetings**—Staff will update the Commission on tentative 2016/2017 meeting dates.

2016 meeting dates and locations:

October 6, 2016 – Echo Bluff State Park

2016 tentative meeting dates and locations:

December 7 or 13, 2016 – Elm Street Conference Center

2017 tentative meeting dates and locations:

January 18, 2017 – Lewis and Clark State Office Building

April 12, 2017 – Lewis and Clark State Office Building

July 19, 2017 – Lewis and Clark State Office Building

October 18, 2017 – Lewis and Clark State Office Building

**Recommended Action:** Decision Item

Adjournment of Meeting—target adjournment 12:00 p.m.

Closed Session

The Commission may go into closed session at any point during this meeting if such action is approved by a majority vote of the commission members who constitute a quorum, to discuss legal, confidential or privileged matters pursuant to section 610.021(1), RSMo; personnel actions pursuant to section 610.021(3), RSMo; personnel records or applications pursuant to section 610.021(13), RSMo; records which are protected from disclosure by law pursuant to section 610.021(14), RSMo; security systems or structural plans pursuant to section 610.021(18) or (19); or other specific reasons identified pursuant to sections 610.021 and 610.022, RSMo and announced in open session.

For more information contact:

Ms. Jessica Becklenberg, SDWC Secretary, P.O. Box 176, Jefferson City, MO 65102

Phone: (573) 751-1300; Fax: (573) 751-3110; E-mail: [Jessica.Becklenberg@dnr.mo.gov](mailto:Jessica.Becklenberg@dnr.mo.gov)

## **SAFE DRINKING WATER COMMISSION**

**Lewis & Clark State Office Building  
Gasconade Camp Conference Room  
Jefferson City, Missouri 65101**

**April 6, 2016**

**10:00 a.m.**

### **Commissioners Present:**

Ms. Elizabeth Grove, Chair  
Mr. Scott Bockencamp, Vice Chair  
Ms. Susan Hazelwood  
Mr. Curt Skouby  
Ms. Charli Jo Ledgerwood  
Mr. Rodger Owens  
Mr. Bruce Manning – via conference call

### **Commissioner Absent:**

Ms. Susan Armstrong

### **Staff Present:**

Mr. David Lamb, WPP/PDWB  
Mr. Todd Eichholz, WPP/PDWB  
Mr. Eric Medlock, WPP/PDWB  
Mr. Jeff Pinson, WPP/PDWB  
Ms. Darleen Groner, WPP/FAC  
Mr. Patrick Vavra, WPP/PDWB  
Mr. Maher Jaafari, WPP/PDWB  
Ms. Trisha Adam, WPP/FMS  
Mr. Terry Timmons, WPP/PDWB  
Mr. Eric Crawford, WPP/FAC  
Ms. Sheri Fry, WPP/PDWB  
Ms. Tammy Hoback-Reichl, DNR/DAS  
Mr. Steve Sturgess, DEQ/HWP

Ms. Leanne Tippett Mosby, DNR/DEQ  
Ms. Jessica Becklenberg, WPP/PDWB  
Mr. Elliott Usher, AGO  
Mr. Brandon Bach, WPP/PDWB  
Ms. Darlene Helmig, WPP/PDWB  
Ms. Judy Morrison, WPP/PDWB  
Mr. Brenda Bardwell, WPP/PDWB  
Ms. Jodi Gerling, WPP/FMS  
Mr. Don Willoh, DNR/DO  
Mr. Jeff Starr, WPP/FAC  
Ms. Sharon Davenport, WPP/FAC  
Mr. Greg Powell, WPP/FAC

### **Call to Order and Introductions**

The meeting was called to order at 10:04 a.m.

The commissioners, department staff and public were asked to introduce themselves. Introductions were made by all in attendance.

### **Approval of the November 12, 2015, open session minutes**

Commissioner Hazelwood made the motion to approve the minutes with updates that were previously provided to the commission secretary. Commissioner Ledgerwood seconded the motion.

The motion carried with Commissioner Bockencamp and Owens abstaining from the vote.

### **Election of Chair and Vice Chair**

Commissioner Boeckenkamp nominated Commissioner Grove as chair and Commissioner Hazelwood for vice-chair. Commissioner Ledgerwood seconded the motion. Motion Carried.

### **Certification of Staff Director to the Safe Drinking Water**

Leanne Tippett Mosby, Director, Division of Environmental Quality

Division Director Leanne Tippett Mosby introduced Mr. David Lamb to the commission She asked that the commission give formal approval to certify Mr. Lamb as Staff Director for the Safe Drinking Water Commission, pursuant to Section 640.010.2 of the Revised Statutes of Missouri.

Commissioner Ledgerwood made a motion to approve Mr. David Lamb as Staff Director of the Safe Drinking Water Commission, pursuant to 640.010.2 of the Revised Statutes of Missouri. Commissioner Hazelwood seconded the motion. Motion Carried.

Commissioner Manning recognized and thanked Mr. Steve Sturgess for all his work with the Safe Drinking Water Commission. Mr. Sturgess stated it was his honor to work with the commission.

### **Drinking Water State Revolving Fund Intended Use Plan Fiscal Year 2016 Comprehensive List and Fundable Projects List Revisions**

Darleen Groner, P.E., Financial Assistance Center

The Department recommended the Commission approve changes to the Fiscal Year 2016 Comprehensive List and Fundable Projects List Drinking Water State Revolving Fund as follows:

- Approve moving Saline County PWSD #1's project from the Planning List to the Very Small Community 20% Reserve Fundable List for \$1,049,055 in loan only. The project meets the readiness to proceed criteria.
- Remove DeKalb County PWSD #1's project from the Small Community 15% Reserve Fundable List. The system decided to finance the project through their existing funds.

Commissioner Skouby made a motion to approve the changes to the Drinking Water State Revolving Fund Intended Use Plan Comprehensive List and Fundable Projects List Revisions. Commissioner Owens seconded the motion to approve the changes. Motion Carried.

### **Primacy Fee Update**

Sheri Fry, Public Drinking Water Branch  
Jodi Gerling, Fiscal Management Section

Ms. Sheri Fry presented an overview of the primacy fee structure in the Safe Drinking Water Regulations. She reminded the commission that the authority to revise the fee structure was changed in 2014, when the Missouri Legislature amended Section 640.100, RSMo., giving the authority for revisions to the Safe Drinking Water Commission. Ms. Fry informed the commission that the department will be conducting a review of the primacy fee which requires conducting stakeholder meetings to give the public an opportunity to comment on the proposed revisions.

Ms. Jodi Gerling presented information regarding the current status of the fund and discussed projections through FY2020.

Chair Grove expressed concern about the time allotted to hold stakeholder meetings regarding this issue. Mr. David Lamb, staff director, said he would review the timeframes proposed and make adjustments to address her concerns. Chair Grove asked staff to forward to the Commissioners, the specific statute discussed that addresses the authority given to the Commission.

Mr. Phil Walsack, Missouri Public Utility Alliance, raised questions regarding the revenue projections of the primacy fee. Department staff provided clarification on the information used in the presentation.

No action taken by the Commission, information only.

### **Backflow Prevention**

Don Summers and Scott Hamilton, American Society of Sanitary Engineering

Mr. Don Summers and Mr. Scott Hamilton asked the Commission to amend regulations in Chapter 11 to allow backflow prevention devices that have been tested by the American Society of Sanitary Engineering. They also stated that the Commission should consider revisions to require state certification of persons that repair the devices. The current rule only requires certification for persons that test the devices.

Mr. Maher Jaafari, Chief of the Permits and Engineering Section, informed the Commission that staff will review the suggested changes and make a recommendation regarding the issue at the next Commission meeting.

No action taken by the Commission, information only.

### **Regulatory/Legislative Update**

Sheri Fry, Public Drinking Water Branch

Ms. Fry presented an update to the Commission on the status of several bills that might be of interest to the Commission. Among the bills discussed were: HB 1717 – Notice to Cease Fluoridation and HB 1452 – Personal Financial Disclosure Reports.

No action taken by the Commission, information only.

### **Stage 2 Disinfectants/Disinfection By-Products**

Eric Medlock, Public Drinking Water Branch

Mr. Eric Medlock, Chemical Monitoring Coordinator for the Monitoring Section, gave a presentation to the Commission on the Stage 2 Disinfectants/Disinfection By-products and Consecutive Systems. He provided an overview on the origin of the Stage 1 DBP Rule and stated that the Stage 2 DBP Rule only applies to community and non-transient non-community water systems. He listed the number of public water systems the rule applies to and showed how the DBP violations have increased starting in the third quarter of 2015. He added that the increase in violations is mostly due to smaller consecutive systems being affected by the systems they are purchasing water from.

Chair Grove requested Mr. Medlock provide an update to the Commission with 2016 first quarter numbers.

No action taken by the Commission, information only.

### **Update of State Water Plan Development Process**

Steve McIntosh, Water Resources Center

Mr. McIntosh presented the status of the State Water Plan. He noted the plan has a detailed scope of work and may be modified as needed as the project moves forward. Director Sara Parker Pauley and Colonel Sexton, Corps of Engineers, signed a new agreement and work on Phase II of the project has begun.

Phase II includes a review of demographic trends and water demands across the state. The plan will establish technical work groups that include water quality, aquatic species, environmental flows, agricultural demands and infrastructure. Stakeholder involvement will also include water Commissions and other inter-agency task forces. The Water Resource Center will be working with all involved and plan to update the Commission quarterly.

No action taken by the Commission, information only.

## **Update on Lead and Copper Issues in Missouri**

Jeff Pinson, Public Drinking Water Branch

Mr. Jeff Pinson, Monitoring Section Lead and Copper Coordinator, presented an overview on Lead and Copper Issues in Missouri. Mr. Pinson discussed requests recently received by the Environmental Protection Agency (EPA) and staff's difficulties responding to them. He provided an example of EPA requesting information regarding the location of lead services lines, stating the department does not gather this information and suspects some water systems do not have the information or do not have accurate information regarding the lines. Commissioner Skouby confirmed that the City of St. Louis does not have that information in their database since service lines are owned by the property owner and not the water system.

Mr. Pinson concluded his presentation by informing the Commission of EPA's intent to propose a new lead and copper rule in either the Fall of 2016 or early 2017.

No action taken by the Commission, information only.

## **Branch Chief Updates**

David Lamb, Public Drinking Water Branch

Mr. Lamb presented staff new to the Branch, including Sheri Fry, who was hired as the Planner III, Joe Stoops, an Environmental Specialist in the Compliance and Enforcement Section and Danielle West, an Environmental Specialist in the Capacity Development/Source Water Protection Unit. He added that Kristin Bailey, Project Plan Reviewer in the Permits and Engineering section resigned and has moved to different program within the department.

He also advised that the Revised Total Coliform Rule became effective on April 1<sup>st</sup> and that the SDWIS database has been updated for compliance with the rule.

He then noted the Department of Health and Senior Services have a new contract courier which began on April 1<sup>st</sup>. He added that there will be new pickup times and pick-up locations. Staff have been working to send an email to operators for their information.

Lastly, he advised the Consumer Confidence Reports were posted to the department's webpage as of April 1<sup>st</sup>.

No action taken by the Commission, information only.

## **Other Business**

No one approached the Commission with other business.

## **Public Comment and Correspondence**

No one approached the Commission for public comment or correspondence.

## **Future Meetings**

### **2016 tentative meeting dates and locations:**

July 2016 – Bennett Springs Conference Room, Elm Street Conference Center

October 2016 – Lewis & Clark State Office Building

Commissioner Grove made the suggestion to set future meeting dates and recommended July 12<sup>th</sup> for the next meeting and October 6, 2016 for the fall meeting.

No action by the Commission, information only.

## **Adjournment**

Commissioner Hazelwood made a motion to adjourn the meeting. Commissioner Skouby seconded the motion. Motion Carried.

Meeting adjourned at 1:10 p.m.

### **Abbreviations and Acronyms Used in These Minutes**

AGO	Attorney General's Office
DAS	Division of Administrative Support
DEQ	Division of Environmental Quality
DBP	Disinfection By-Product
DNR	Department of Natural Resources
DO	Director's Office
EPA	Environmental Protection Agency
FAC	Financial Assistance Center
FMS	Fiscal Management Section
FY	Fiscal Year
HB	House Bill
HWP	Hazardous Waste Program
PDWB	Public Drinking Water Branch
PWSD	Public Water Supply District
WPP	Water Protection Program

Safe Drinking Water Commission

Department of Natural Resources  
Division of Environmental Quality  
Water Protection Program  
Public Drinking Water Branch  
July 12, 2016

**State Revolving Fund**

**Issue:** Proposed Amendments to the Fiscal Year (FY) 2016 Drinking Water State Revolving Fund Intended Use Plan (IUP) Comprehensive List and Fundable Project Lists

**Background:**

The village of Sunrise Beach Phase I project includes repairs to Standpipe No. 1, the addition of chlorine analyzers and wireless monitoring, new installation of pipe, gate valves, hydrants, service connection meters, pressure reducing valves, and other appurtenances necessary to provide safe water to several unserved areas. The areas to be served include the Cliff Drive/Beachwood Road/Kansas City Way area, Castle Garden Road, and Ambrosia Lane. The project is currently on the Very Small Community 20% Reserve Fundable List as a disadvantaged community for the project amount of \$1,153,790. The increased project cost is \$1,179,494. The proposed funding allocation is \$314,151 loan and \$865,343 grant. The increase in funds will be loan only since there are no unallocated grant funds available at this time.

The village of Sunrise Beach Phase II project includes new installation of pipe, gate valves, hydrants, service connection meters, pressure reducing valves, and other appurtenances necessary to provide safe water to an unserved area that has recently been annexed into the village. The area to be served includes Lucky Strike Drive/Eddie Road. The project is currently on the Planning List in the amount of \$314,308. The area was recently annexed into the village, and now meets the readiness to proceed criteria. They also increased the project amount to \$473,700. This system meets the definition of disadvantaged community and is being proposed to be moved to the Very Small 20% Reserve Fundable List for loan only since there are no unallocated grant funds available at this time.

Jefferson County PWSD #2's project is currently on the General Community 65% Reserve Fundable List in the amount of \$1,875,691 loan only. The system requested to withdraw from the program.

These changes increase the available fund balance from \$6,577,451 to \$7,953,738.

Furthermore, staff is recommending that the project lists be amended as follows:

**Recommended Actions:**

- Sunrise Beach Phase I, DW291219-02. Approve the increased project amount for the village of Sunrise Beach's Phase I project on the Very Small Community 20% Reserve Fundable List from \$1,153,790 to \$1,179,494, the revised funding allocation is \$314,151 in loan and \$865,343 in grant funds.
- Sunrise Beach Phase II, DW291219-03. Approve moving the Village of Sunrise Beach Phase II project to the Very Small Community 20% Reserve Fundable List in the amount requested of \$473,700 with the full amount allocated as loan funding.
- Remove Jefferson County PWSD #1, DW291355-01 from the General Community 65% Reserve Fundable List with a project amount of \$1,875,691.

**Suggested Motion Language:** "I move to approve the proposed changes to the Fiscal Year 2016 Drinking Water State Revolving Fund Intended Use Plan, Comprehensive List and Fundable Project Lists for Drinking Water State Revolving Fund Loans as proposed."

**Attachment:**

Revised FY 2016 Drinking Water State Revolving Fund Intended Use Plan Comprehensive List and Fundable Project Lists.

Safe Drinking Water Commission

Department of Natural Resources  
Division of Environmental Quality  
Water Protection Program  
Public Drinking Water Branch  
July 12, 2016

**BACKFLOW PREVENTION**

**Background:**

At the last SDWC meeting, Mr. Don Summers, with the American Society of Sanitary Engineering (ASSE), gave a presentation to the Commission regarding a proposal to amend the Safe Drinking Water Rules, Chapter 11—Backflow Prevention. The Commission requested staff research his request and provide more information at the next SDWC meeting in July 2016.

**Presentation:**

Brandon Bach, PDWB Project Plan Reviewer, Permits & Engineering Section, will present his analysis regarding ASSE approved devices. His presentation will be provided in your commissioner notebooks.

**Recommendation:**

Information Only



# **MISSOURI DEPARTMENT OF NATURAL RESOURCES**

**Fiscal Year 2016**

(Reporting Year Oct. 1, 2015 – Sept. 30, 2016)

## **Drinking Water State Revolving Fund Intended Use Plan**

**Adopted Nov. 12, 2015**

**Amended April 6, 2016**

***Proposed Amendment July 12, 2016***

## Comprehensive List

**Note:** \* Carried over from the last Intended Use Plan X Fundable in the last Intended Use Plan

		Priority Points	Applicant	DWSRF #	Population Served	Loan Request
*	X	150	Fredericktown Water Systems	DW291346-01	3,985	\$ 2,921,631
		104	Dexter	DW291320-01	7,545	\$ 10,100,000
*	X	99	Sparta	DW291277-02	1,752	\$ 3,841,523
*		93	Terre Du Lac Utilities Corporation	DW291352-01	2,500	\$ 1,953,300
*	X	90	Reeds Spring	DW291348-01	913	\$ 1,246,000
*		78	Bowling Green (Treatment and Distribution)	DW291167-04	5,334	\$ 2,254,000
		77	Jefferson Co. PWSD #2	DW291355-01	20,000	\$ 1,875,691
		68	Marshfield	DW291148-02	6,633	\$ 3,899,100
*		67	3.100 Louisiana, Pike County	DW291025-02	3,364	\$ 1,339,103
		67	Buchanan County PWSD #1 (Interconnection and Distribution)	DW291339-02	2,400	\$ 3,380,000
*	X	65	Lathrop (Line Replacement)	DW291195-03	2,086	\$ 2,044,362
		65	Campbell	DW291333-01	1,992	\$ 2,592,613
*	X	65	Birch Tree	DW291350-01	679	\$ 2,475,100
*	X	63	Peculiar (Peculiar Dr., Harr-Grove Rd. and Spencer Addition)	DW291272-03	4,608	\$ 1,341,465
		60	Harrisonville	DW291356-01	9,743	\$ 8,548,938
		56	Osage County PWSD #1	DW291361-01	1,200	\$ 2,000,000
*		55	Sikeston (New Treatment Plant)	DW291037-03	17,000	\$ 12,360,000
*	X	55	Sunrise Beach - Phase 1	DW291219-02	431	<del>\$ 1,153,790</del> \$ 1,179,494
*	X	55	Sunrise Beach - Phase 2	DW291219-03	431	<del>\$ 314,308</del> \$ 473,700
*		50	Pierce City	DW291345-01	1,385	\$ 1,667,421
		47	Knox County PWSD #1	DW291354-01	4,298	\$ 441,870
*	X	47	Missouri City	DW291351-01	267	\$ 1,142,352
		45	Clarksville	DW291358-01	480	\$ 268,300
		44	Saline County PWSD #1	DW291359-01	591	\$ 1,049,055
*	X	39	Poplar Bluff (UV, Backup Supply and Distribution)	DW291204-03	17,023	\$ 1,616,900
		38	Jackson Co. PWSD #13	DW291336-01	5,400	\$ 3,000,000
*		35	Cassville	DW291300-02	3,266	\$ 5,040,866
		35	MoArk Water Company	DW291362-01	1,350	\$ 5,982,951
*		35	Saline County PWSD #2	DW291349-01	1,000	\$ 600,000
		34	Cass County PWSD #5	DW291360-01	2,670	\$ 341,445
*	X	34	Brashear	DW291347-01	273	\$ 806,840
		32	Osage County PWSD #3	DW291216-02	1,400	\$ 633,710
<b>Total Comprehensive List Projects</b>						<del>\$ 90,403,565</del> <b>\$ 88,417,730</b>

**Allocation Of Available Loan Funds**

Missouri law requires that twenty percent and fifteen percent of available funds shall be made available to water systems serving populations of 3,300 or less (designated as very small communities) and water systems serving populations of 3,301 to 9,999 (designated as small communities respectively). The remaining sixty five percent (designated for general community) is not restricted by population served.

**It is important to note:**

- \* The fundable project lists may change significantly between the draft Intended Use Plan placed on public notice and the final version approved by the Safe Drinking Water Commission.
- \* The inclusion of a project on the fundable list is not a guarantee of funding. Other factors, such as timely progress toward funding, compliance with program requirements and funding availability, may impact project funding.
- \* If a system is utilizing a Contract For Engineering Services: Design and Development for Community Water Systems Grant from the Department, their SRF project was reduced by a like amount.

Distribution of Available Funds

		Loan	Grant
Very Small Community	20%	\$ 8,375,309	\$ 9,329,209
Small Community	15%	\$ 6,281,481	\$ -
General Community	65%	\$ 27,219,753	\$ -
<b>Total Available Funds</b>		<b>\$ 41,876,543</b>	<b>\$ 9,329,209</b>

**Financial Summary of the Fundable Projects Lists - Note: The contents of this table have been updated to reflect the changes in the pages that follow.**

	Loans				Grants			
	Very Small Community	Small Community	General Community	Total	Very Small Community	Small Community	General Community	Total
<b>Allocation</b>	\$ 8,375,309	\$ 6,281,481	\$ 27,219,753	\$ 41,876,543	\$ 9,329,209	\$ -	\$ -	\$ 9,329,209
<b>Total Projects (1)</b>	\$ (12,594,771)	\$ (19,711,134)	\$ (1,616,900)	\$ (33,922,805)	\$ (9,329,209)	\$ -	\$ -	\$ (9,329,209)
<b>Balance Before Transfers</b>	\$ (4,219,462)	\$ (13,429,653)	\$ 25,602,853	\$ 7,953,738	\$ -	\$ -	\$ -	\$ -
Transfers	\$ 4,219,462	\$ 13,429,653	\$ (4,219,462)	\$ -				\$ -
<b>Total Transfers</b>	\$ 4,219,462	\$ 13,429,653	\$ (17,649,115)	\$ -	\$ -	\$ -	\$ -	\$ -
<b>Balance Available (2)</b>	\$ -	\$ -	\$ 7,953,738	\$ 7,953,738	\$ -	\$ -	\$ -	\$ -
<b>Amount Forward to Project Tables (3)</b>	\$ 12,594,771	\$ 19,711,134	\$ 9,570,638	\$ 41,876,543	\$ 9,329,209	\$ -	\$ -	\$ 9,329,209

- (1) From the Project Lists on the subsequent pages.
- (2) Balance may be shifted to other categories to fund projects that are ready to proceed.
- (3) Amount equals the Allocation + Total Transfers.

**Very Small Community 20% Reserve Fundable List**  
**(Systems that serve a population of 3,300 or fewer)**

			Priority Points	Applicant	DWSRF #	Pop.	Description / Needs	Problem Code	Amount Requested	Loan	Grant	Financing Schedule FY - Quarter
<b>Amount Available</b>									<del>\$ 12,095,367</del> \$ 12,594,771	\$ 9,329,209		
*	X	D	90	Reeds Spring	DW291348-01	913	Dis	3	\$ 1,246,000	\$ 311,500	\$ 934,500	16-2
		D	65	Campbell	DW291333-01	1,992	Dis	3	\$ 2,592,613	\$ 648,153	\$ 1,944,460	16-4
*	X	D	65	Birch Tree	DW291350-01	679	Dis, Stor	3	\$ 2,475,100	\$ 618,775	\$ 1,856,325	16-2
*	X	D	55	<b>Sunrise Beach - Phase 1</b>	<b>DW291219-02</b>	<b>431</b>	<b>Dis</b>	<b>3</b>	<del>\$ 1,153,790</del> \$ 1,179,494	<del>\$ 288,447</del> \$ 314,151	\$ 865,343	<b>16-1</b>
*		D	55	<b>Sunrise Beach - Phase 2</b>	<b>DW291219-03</b>	<b>431</b>	<b>Dis</b>	<b>3</b>	<del>\$ 314,308</del> \$ 473,700	<del>\$ 314,308</del> \$ 473,700	\$ -	<b>16-4</b>
		D	45	Clarksville	DW291358-01	480	Well	3	\$ 268,300	\$ 67,075	\$ 201,225	16-4
*	X		99	Sparta	DW291277-02	1,752	Well, Stor, Dis	3	\$ 3,841,523	\$ 1,920,762	\$ 1,920,761	16-1
*	X		65	Lathrop (Line Replacement)	DW291195-03	2,086	Dis	3	\$ 2,044,362	\$ 1,022,181	\$ 1,022,181	16-4
			56	Osage County PWSD #1	DW291361-01	1,200	Dis, Stor	3	\$ 2,000,000	\$ 1,415,586	\$ 584,414	16-4
			50	Scotland Co. Consolidated PWSD #1	DW291357-01	2,668	Dis	3	\$ 2,170,931	\$ 2,170,931	\$ -	16-4
*	X		47	Missouri City	DW291351-01	267	Dis	3	\$ 1,142,352	\$ 1,142,352	\$ -	16-3
			44	Saline County PWSD #1	DW291359-01	591	Dis, Stor	3	\$ 1,049,055	\$ 1,049,055	\$ -	16-4
*	X		34	Brashear	DW291347-01	273	Stor	3	\$ 806,840	\$ 806,840	\$ -	16-4
			32	Osage County PWSD #3	DW291216-02	1,400	Dis, Stor	3	\$ 633,710	\$ 633,710	\$ -	16-4
<b>Total Fundable Projects</b>									<del>\$ 21,424,576</del> \$ 21,923,980	<del>\$ 12,095,367</del> \$ 12,594,771	\$ 9,329,209	

<b>Balance</b>			\$ -	\$ -	
* - Carried over from the last Intended Use Plan			TP - Treatment	1 - Compliance	
X - Fundable in the last Intended Use Plan			Stor – Storage	2 - Public Health	
D - Disadvantaged			Dis – Distribution	3 - Future Regulatory Violation Expected	
			Rehab - Rehabilitation		

**Small Community 15% Reserve Fundable List**  
**(Systems that serve a population of 3,301 to 9,999)**

			Priority Points	Applicant	DWSRF #	Pop.	Description / Needs	Problem Code	Amount Requested	Loan	Grant	Financing Schedule FY - Quarter	
<b>Amount Available</b>										\$ 19,711,134	\$ -		
*	X		150	Fredericktown Water Systems	DW291346-01	3,985	TP, Dis, Stor	3	\$ 2,921,631	\$ 2,921,631	\$ -	16-4	
			68	Marshfield	DW291148-02	6,633	TP, Stor	3	\$ 3,899,100	\$ 3,899,100	\$ -	16-4	
*	X		63	Peculiar (Peculiar Dr., Harr-Grove Rd. and Spencer Addition)	DW291272-03	4,608	Dis	3	\$ 1,341,465	\$ 1,341,465	\$ -	16-1	
			60	Harrisonville	DW291356-01	9,743	TP	3	\$ 8,548,938	\$ 8,548,938	\$ -	16-3	
			38	Jackson Co. PWSD #13	DW291336-01	5,400	Dis	3	\$ 3,000,000	\$ 3,000,000	\$ -	16-4	
<b>Total Fundable Projects</b>										\$ 19,711,134	\$ 19,711,134	\$ -	
<b>Balance</b>										\$ -	\$ -		
* - Carried over from the last Intended Use Plan				TP - Treatment	1 - Compliance								
X - Fundable in the last Intended Use Plan				Stor – Storage	2 - Public Health								
D - Disadvantaged				Dis – Distribution	3 - Future Regulatory Violation Expected								
				Rehab - Rehabilitation									

**General Community 65% Reserve Fundable List  
(Not restricted by population served)**

			Priority Points	Applicant	DWSRF #	Pop.	Description / Needs	Problem Code	Amount Requested	Loan	Grant	Financing Schedule FY - Quarter
<b>Amount Available</b>									<del>\$ 10,070,042</del> \$ 9,570,638	\$ -		
			77	<del>Jefferson Co. PWSD #2</del>	<del>DW291355-01</del>	<del>20,000</del>	<del>Well, Dis</del>	<del>3</del>	<del>\$ 1,875,691</del>	<del>\$ 1,875,691</del>	<del>\$ -</del>	<del>16-4</del>
*	X		39	Poplar Bluff (UV, Backup Supply and Distribution)	DW291204-03	17,023	Well, Dis, TP	3	\$ 1,616,900	\$ 1,616,900	\$ -	16-2
<b>Total Fundable Projects</b>									<del>\$ 3,492,591</del> \$ 1,616,900	<del>\$ 3,492,592</del> \$ 1,616,900	\$ -	
<b>Balance</b>									<del>\$ 6,577,451</del> \$ 7,953,738	\$ -		
* - Carried over from the last Intended Use Plan						TP - Treatment			1 - Compliance			
X - Fundable in the last Intended Use Plan						Stor – Storage			2 - Public Health			
D - Disadvantaged						Dis – Distribution			3 - Future Regulatory Violation Expected			
						Rehab - Rehabilitation						

**Fundable Contingency List**

			Priority Points	Applicant	DWSRF #	Pop.	Description / Needs	Problem Code	Amount Requested
<b>Total Fundable Contingency Projects</b>									\$ -

* - Carried over from the last Intended Use Plan	TP - Treatment	1 - Compliance
X - Fundable in the last Intended Use Plan	Stor – Storage	2 - Public Health
D - Disadvantaged	Dis – Distribution	3 - Future Regulatory Violation Expected
	Rehab - Rehabilitation	

**Planning List**

	Priority Points	Applicant	DWSRF #	Population	Description	Problem Code	Needs Category	Loan Request
	104	Dexter	DW291320-01	7,545	Well, TP, Stor, Dis	3	I, II, III, IV	\$ 10,100,000
*	93	Terre Du Lac Utilities Corporation	DW291352-01	2,500	TP, Well, Dis, Stor	1	I, II, III, IV	\$ 1,953,300
*	78	Bowling Green (Treatment and Distribution)	DW291167-04	5,334	TP, Dis	3	II, IV	\$ 2,254,000
*	67	3.100 Louisiana, Pike County	DW291025-02	3,364	Dis, Stor	3	III, IV	\$ 1,339,103
	67	Buchanan County PWSD #1 (Interconnection and Distribution)	DW291339-02	2,400	Dis	3	I, IV	\$ 3,380,000
*	55	Sikeston (New Treatment Plant)	DW291037-03	17,000	TP	3	II	\$ 12,360,000
*	<del>55</del>	<del>Sunrise Beach - Phase 2</del>	<del>DW291219-03</del>	<del>431</del>	<del>Dis</del>	<del>3</del>	<del>IV</del>	<del>\$ 314,308</del>
*	50	Pierce City	DW291345-01	1,385	Dis, Stor	3	III, IV	\$ 1,667,421
	47	Knox County PWSD #1	DW291354-01	4,298	Dis	3	I	\$ 441,870
*	35	Cassville	DW291300-02	3,266	TP, Dis, Stor	3	II, III, IV	\$ 5,040,866
	35	MoArk Water Company	DW291362-01	1,350	Dis	3	IV	\$ 5,982,951
*	35	Saline County PWSD #2	DW291349-01	1,000	Dis	3	III, IV	\$ 600,000
	34	Cass County PWSD #5	DW291360-01	2,670	Dis	3	IV	\$ 341,445
<b>Total Planning List Projects</b>								<del>\$ 45,775,264</del> <b>\$ 45,460,956</b>

\* Carried over from the last Intended Use Plan

**Abbreviations and Codes**

Abbreviations	Problem Codes	Need Category Codes
TP - Treatment	1 - Compliance	I - Source
Stor - Storage	2 - Public Health	II - Treatment
Dis - Distribution	3 - Future Regulatory Violation Expected	III - Storage
Rehab - Rehabilitation		IV - Transmission/Distribution



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# Proposed Backflow Regulation Changes

Brandon Bach

Public Drinking Water Branch

# Background

- At the April 6, 2016 SDWC meeting Mr. Summers and Mr. Hamilton of ASSE asked the commission to consider two rule changes:
  - Allow devices approved by ASSE to be installed in addition to devices approved by USC.
  - Mandate individuals who repair the devices to be certified as backflow repairers.
- The commission asked the branch to look into the proposals.

# Current Regulations

- Devices installed in the state must be approved by University of South California's Foundation for Cross-Connection Control and Hydraulic Research (USC).
- Current list has ~3,700 devices listed from 13 manufacturers.

# Testing Methodology

- Devices approved by make, model, and size
- USC and ASSE both do laboratory tests.
- USC requires devices pass a 12 month field test.
  - According to USC 30% of devices fail field test on first attempt.
- ASSE field test optional.
  - Similar to USC field test.

# Testing Methodology

- Lab testing methods between the two are essentially the same.
- USC tests in their own lab.
- ASSE has list of approved labs around the country.
  - USC being one of them.

# Comparison

- Looked at approvals from 2 manufacturers.
- 42 models
  - 567 unique devices
- Devices with pending approvals or devices that neither had approved were not counted.

⊕ = Approved / Compliant / Classified - Vert & Horz    ⦿ = Pending Approval  
● = Approved / Compliant / Classified - Horz    ○ = Not Applicable  
◎ = Approved / Compliant / Classified - Other Orientations

[USC Approvals Explanation](#) 

Size	Model	ASSE 	FM 	Lead Free† 	UL 	ULC 	USC 
1/4"	919 QT	⊕	○	○	○	○	⦿
3/8"	919 QT	⊕	○	○	○	○	⦿
1/2"	919 QT	⊕	○	○	○	○	⦿
3/4"	919 QT	◎	○	○	○	○	●
1"	919 QT	◎	○	○	○	○	●
1-1/4"	919 QT	◎	○	○	○	○	●
1-1/2"	919 QT	◎	○	○	○	○	●
2"	919 QT	◎	○	○	○	○	●
3/4"	919A QT	◎	○	○	○	○	◎
1"	919A QT	◎	○	○	○	○	◎
1-1/4"	919A QT	◎	○	○	○	○	◎
1-1/2"	919A QT	◎	○	○	○	○	◎
2"	919A QT	◎	○	○	○	○	◎
3/4"	919Z QT	◎	○	○	○	○	◎
1"	919Z QT	◎	○	○	○	○	◎
1-1/4"	919Z QT	◎	○	○	○	○	◎
1-1/2"	919Z QT	◎	○	○	○	○	◎
2"	919Z QT	◎	○	○	○	○	◎
3/4"	U919 QT	◎	○	○	○	○	●
1"	U919 QT	◎	○	○	○	○	●
1-1/4"	U919 QT	◎	○	○	○	○	●
1-1/2"	U919 QT	◎	○	○	○	○	●

Screenshot of Watts 919 RP approvals

# Comparison

- 82% approved by both ASSE and USC in some way.
  - 66% approved with same conditions.
  - 16% approved with different conditions.
    - Ex. one only approved it to be installed horizontally, the other approved it for both horizontal and vertical installation.
- 9% approved only by USC
- 9% approved only by ASSE
- Important to note that a device not being listed doesn't necessarily mean it failed. Could also mean the manufacturer did not submit device for evaluation.

# Neighboring States

- Arkansas
  - ANSI/AWWA or ASSE or CSA
- Illinois
  - ASSE or CSA or USC or ANSI or NSF
- Iowa
  - USC or ASSE
- Kansas
  - As determined by PWS
- Kentucky
  - ASSE or USC or CSA
- Nebraska
  - USC or ANSI or UL or NSF or IAPMO
- Oklahoma
  - Within state plumbing code
- Tennessee
  - USC

**CSA**- Canadian Standards Association  
**ANSI**- American National Standards Institute  
**NSF**- National Science Foundation  
**IAPMO**- International Association of Plumbing and Mechanical Officials

# 10 States Standards Members

- Indiana
  - USC or ASSE or CSA
- Michigan
  - ASSE or CSA
- Minnesota
  - ASSE
- New York
  - USC
- Ohio
  - ASSE or USC or CSA
- Pennsylvania
  - As determined by PWS
- Wisconsin
  - ASSE or CSA
- Illinois, Iowa, and Missouri are also members

\*10 States Standards is what our community design guide is modeled after

# Backflow Repairers

- RSMo 640.100.3 doesn't give the commission authority to promulgate rules on backflow repairers.
- Would require the legislature to amend the statute before the commission can consider a rule change.

# Next Steps

- **ASSE Approved Devices**
  - Branch has no issue amending the regulations to allow devices approved by ASSE.
  - Begin rule making process.
- **Certified Backflow Repairers**
  - No action at this time.



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# QUESTIONS?

BRANDON BACH

PUBLIC DRINKING WATER BRANCH

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Department of Natural Resources  
Division of Environmental Quality  
Water Protection Program  
Public Drinking Water Branch  
July 12, 2016

**Regulatory/Legislation Update**

**Background:**

The Commission to be provided an overview of legislation that was filed during the 2016 legislative session that may have affected the department.

**Recommendation:**

Information only

Presented by: Sheri Fry, Public Drinking Water Branch

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**Background:**

In 2012, the Missouri Legislature instituted a 5-year rolling review, for all state agencies with existing rules; the review began in July of 2015.

The Commission will be provided an overview of the 5-year rule review and the department's responsibilities regarding this requirement.

**Recommendation:**

Information only

Presented by: Sheri Fry, Public Drinking Water Branch

Safe Drinking Water Commission

Department of Natural Resources  
Division of Environmental Quality  
Water Protection Program  
Public Drinking Water Branch  
July 12, 2016

**Stage 2 Disinfectants/Disinfection Byproduct Rule**

**Background:**

April 2012 began the Stage 2 DBP Rule for both primary and consecutive systems. The rule phased in systems compliance start dates based on the size of the largest system in a combined distribution system (CDS). Large systems greater than 100,000 population and their CDS are Schedule 1 systems and began Stage 2 compliance monitoring April 2012. The small and very small systems less than 50,000 and 10,000 are Schedule 3 & 4 systems and were the last to begin monitoring in October 2013. The rule allowed possible extensions to the compliance date for required small system cryptosporidium monitoring systems as well as other Schedule 3 & 4 construction of process improvements for DBPs. The last extension expired October 2015.

**Presentation:**

Maximum Contaminant Level (MCL) Violations for DBP exceedances have been dramatically increasing due to smaller systems not making or completing necessary improvements to reduce DBPs in the production of the water. Additionally, the consecutive systems have only a few effective methods of reducing DBPs when the primary system DBP levels are at or near the MCL level. The Best Available Technologies (BATs) to lower DBPs has been for the primary system to incorporate chloramines as the primary disinfection method and for consecutive systems to aggressively flush or install storage tank aeration and/or mixing to gas off chloroform and other Total Trihalomethane (TTHM) constituents. Additional reporting requirements (Operational Evaluation Level (OEL)) will be implemented based on the Stage 2 DBP Rule beginning in the third quarter of 2016. The reporting format is still under development but will be required of systems that exceed the MCL based on a calculation of results from three (3) quarters instead of waiting for a compliance determination in the fourth quarter that establishes their Locational Running Annual Average (LRAA).

**Recommendation:**

Information only. (Update to April 6, 2016 SDWC meeting.)

# Stage 2 Disinfectants/Disinfection Byproduct Rule (D/DBPR) and Consecutive Systems (continued)

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Eric Medlock

Chemical Monitoring Coordinator

Public Drinking Water Branch

# Maximum Contaminant Levels

- Total trihalomethanes 0.080 mg/l (80 µg/l)
- Haloacetic acids (5) 0.060 mg/l (60 µg/l)

## Locational Running Annual Average (LRAA)

- An LRAA is the yearly average of all the results at each specific sampling site in the distribution system.
- If a system exceeds the LRAA MCL at **one** or more of the sampling sites it has violated the rule.

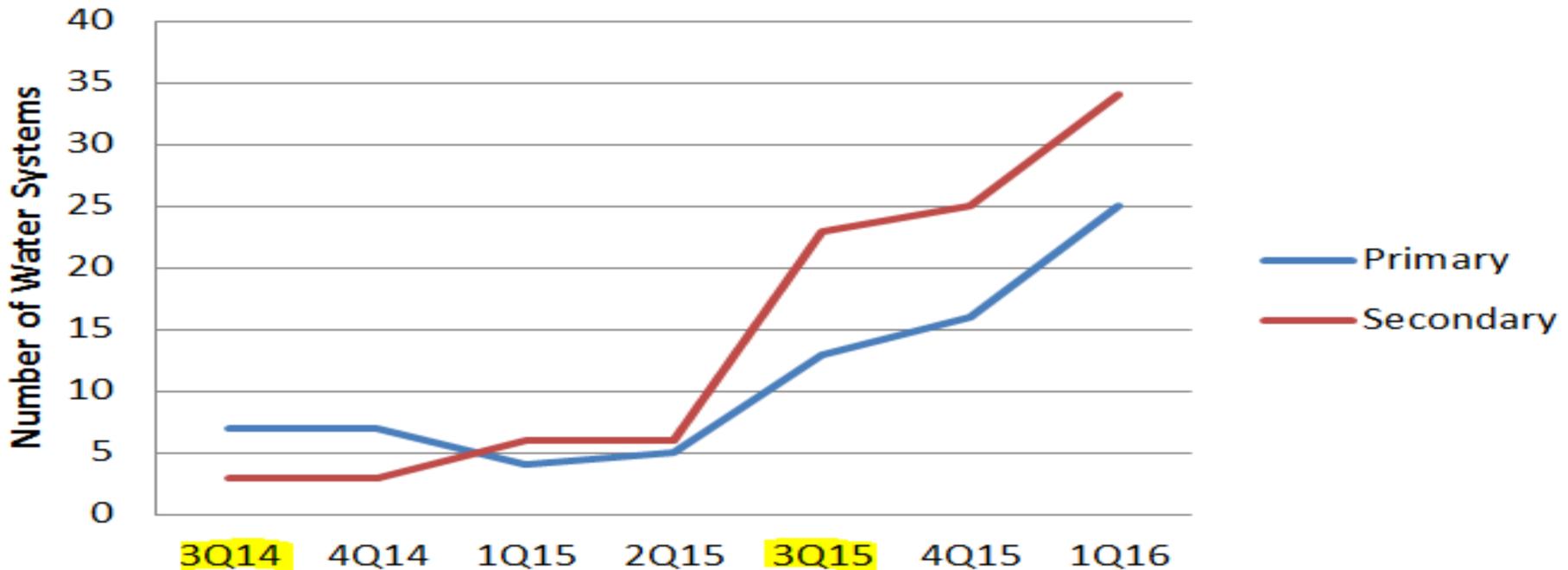


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CDS_ID	NUMBER0	SUPPLYNAME	COURT	ANALYT	IDENTIFICATION	DESCRIPTION_TEXT	1Q15	2Q15	3Q15	4Q15	LRAA	POPUL	REGION
1426	MO1010001	ADRIAN	SW	TTHM	DBPDUAL-01	#18-WATER SUPPLY STA	111	47.5	102	88.3	87	1677	KCRO
1426	MO1010001	ADRIAN	SW	HAA5	DBPDUAL-01	#18-WATER SUPPLY STA	38.8	27.2	21.1	31.2	30	1677	KCRO
1426	MO1010001	ADRIAN	SW	TTHM	DBPDUAL-02	#14-CITY HALL - 16 W 5	44.5	49	76.3	71.8	60	1677	KCRO
1426	MO1010001	ADRIAN	SW	HAA5	DBPDUAL-02	#14-CITY HALL - 16 W 5	39.9	27.2	34.3	30.6	33	1677	KCRO
1426	MO1024034	BATES CO PWSD 5	SWP	TTHM	DBPDUAL-01	BALLARD FEED STORE-I	52.6	63.5	161	108	96	2637	KCRO
1426	MO1024034	BATES CO PWSD 5	SWP	HAA5	DBPDUAL-01	BALLARD FEED STORE-I	27.4	32.4	62.5	17.9	35	2637	KCRO
1426	MO1024034	BATES CO PWSD 5	SWP	TTHM	DBPDUAL-02	W SUB-STATION - NEAR	40.6	48.3	89.8	61.1	60	2637	KCRO
1426	MO1024034	BATES CO PWSD 5	SWP	HAA5	DBPDUAL-02	W SUB-STATION - NEAR	31.3	32	45.4	28.4	34	2637	KCRO
1432	MO1010177	HENRY CO WATER COMPANY	SW	TTHM	DBPDUAL-01	S1-4 - 2306 N HWY 13	53.9	56.2	80.6	92.2	71	9400	KCRO
1432	MO1010177	HENRY CO WATER COMPANY	SW	HAA5	DBPDUAL-01	S1-4 - 2306 N HWY 13	39.1	33.7	52.4	57.7	46	9400	KCRO
1432	MO1010177	HENRY CO WATER COMPANY	SW	TTHM	DBPDUAL-02	S1-2 - 115 W ROGERS S	55.1	53.8	84.3	94.3	72	9400	KCRO
1432	MO1010177	HENRY CO WATER COMPANY	SW	HAA5	DBPDUAL-02	S1-2 - 115 W ROGERS S	45.8	31.8	46.9	42.5	42	9400	KCRO
1432	MO1010076	BLAIRSTOWN	SWP	TTHM	DBPDUAL-01	FIRE DEPT-105 N MAIN	34	29.8	57	79.3	50	185	KCRO
1432	MO1010076	BLAIRSTOWN	SWP	HAA5	DBPDUAL-01	FIRE DEPT-105 N MAIN	16.8	14.1	16.6	0	12	185	KCRO
1432	MO1010123	CALHOUN	SWP	TTHM	DBPDUAL-01	JAMES BURSON-301 S H	61	62.6	87.4	135	87	496	KCRO
1432	MO1010123	CALHOUN	SWP	HAA5	DBPDUAL-01	JAMES BURSON-301 S H	47	37.6	63.5	83.2	58	496	KCRO
1432	MO1010808	URICH	SWP	TTHM	DBPDUAL-01	CITY HALL-308 MAIN STREET		Triggered	88	79.2	42	499	KCRO
1432	MO1010808	URICH	SWP	HAA5	DBPDUAL-01	CITY HALL-308 MAIN STREET		Triggered	0	0	0	499	KCRO
1432	MO1021117	HENRY CO PWSD 3	SWP	TTHM	DBPDUAL-01	SM1-YODER-231 NE HV	63.2	67.1	78.1	129	84	2495	KCRO
1432	MO1021117	HENRY CO PWSD 3	SWP	HAA5	DBPDUAL-01	SM1-YODER-231 NE HV	46.9	41.2	45.7	75.3	52	2495	KCRO
1432	MO1021117	HENRY CO PWSD 3	SWP	TTHM	DBPDUAL-02	S1-2-COUNTRY STORE-	59.4	62.1	89	100	78	2495	KCRO
1432	MO1021117	HENRY CO PWSD 3	SWP	HAA5	DBPDUAL-02	S1-2-COUNTRY STORE-	38.2	36.3	42.8	58.9	44	2495	KCRO
1432	MO1021175	HENRY CO PWSD 4	SWP	TTHM	DBPDUAL-01	URICH VAULT-INTERSEC	59.9	58.4	83.2	128	82	1025	KCRO
1432	MO1021175	HENRY CO PWSD 4	SWP	HAA5	DBPDUAL-01	URICH VAULT-INTERSEC	36.2	37.9	54.7	62.7	48	1025	KCRO
1432	MO1021175	HENRY CO PWSD 4	SWP	TTHM	DBPDUAL-02	MASTER METER-BOOST	57.6	56.2	92	123	82	1025	KCRO
1432	MO1021175	HENRY CO PWSD 4	SWP	HAA5	DBPDUAL-02	MASTER METER-BOOST	38.2	44.4	56	59.7	50	1025	KCRO



## DPB Violations



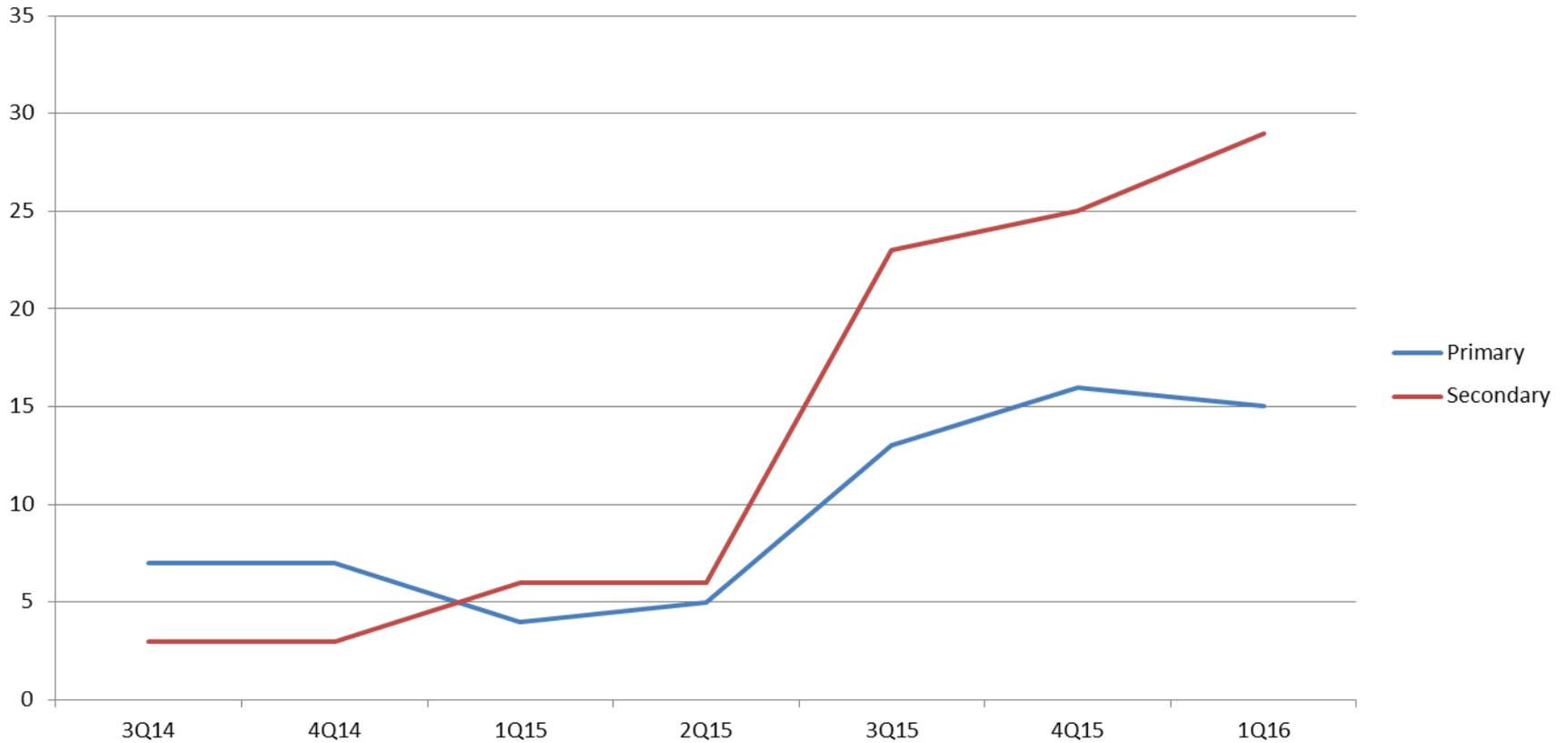
- 3Q13 – Schedule 3 & 4 Stage 2 DBPR begin Compliance Monitoring
- 4Q14 – After four (4) quarters make Compliance Determination (CD)
- 3Q15 – Schedule 4 Crypto Monitoring CD Date (50 PWS)
- 1Q16 – ESTIMATED DBP violations
- 3Q16 – Hannibal (2)/Marshall (10 PWS) Construction Ext. CD Date



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CDS_ID	NUMBER0	SUPPLYNAME	OUR	ANALYT	NTIFICATION	DESCRIPTION_TEXT	2Q15	3Q15	4Q15	1Q16	LRAA	POPUL	REGION
1426	MO1010001	ADRIAN	SW	HAA5	DBPDUAL-01	#18-WATER SUPPLY STATION-12 W N	27.2	21.1	31	27	27	1677	KCRO
1426	MO1010001	ADRIAN	SW	TTHM	DBPDUAL-02	#14-CITY HALL - 16 W 5TH ST	49	76.3	71	50	62	1677	KCRO
1426	MO1010001	ADRIAN	SW	HAA5	DBPDUAL-02	#14-CITY HALL - 16 W 5TH ST	27.2	34.3	30	29	30	1677	KCRO
1426	MO1024034	BATES CO PWSD 5	SWP	TTHM	DBPDUAL-01	BALLARD FEED STORE-BB HWY-ADRI	63.5	161	108	76	102	2637	KCRO
1426	MO1024034	BATES CO PWSD 5	SWP	HAA5	DBPDUAL-01	BALLARD FEED STORE-BB HWY-ADRI	32.4	62.5	17	26	35	2637	KCRO
1426	MO1024034	BATES CO PWSD 5	SWP	TTHM	DBPDUAL-02	W SUB-STATION - NEAR W MAIN ST &	48.3	89.8	61	45	61	2637	KCRO
1426	MO1024034	BATES CO PWSD 5	SWP	HAA5	DBPDUAL-02	W SUB-STATION - NEAR W MAIN ST &	32	45.4	28	18	31	2637	KCRO
1432	MO1010177	HENRY CO WATER COMPAS	SW	TTHM	DBPDUAL-01	S1-4 - 2306 N HWY 13	56.2	80.6	92	65	74	9400	KCRO
1432	MO1010177	HENRY CO WATER COMPAS	SW	HAA5	DBPDUAL-01	S1-4 - 2306 N HWY 13	33.7	52.4	57	43	47	9400	KCRO
1432	MO1010177	HENRY CO WATER COMPAS	SW	TTHM	DBPDUAL-02	S1-2 - 115 W ROGERS STREET	53.8	84.3	94	64	74	9400	KCRO
1432	MO1010177	HENRY CO WATER COMPAS	SW	HAA5	DBPDUAL-02	S1-2 - 115 W ROGERS STREET	31.8	46.9	42	40	40	9400	KCRO
1432	MO1010076	BLAIRSTOWN	SWP	TTHM	DBPDUAL-01	FIRE DEPT-105 N MAIN STREET	29.8	57	79	46	53	185	KCRO
1432	MO1010076	BLAIRSTOWN	SWP	HAA5	DBPDUAL-01	FIRE DEPT-105 N MAIN STREET	14.1	16.6	0	0	8	185	KCRO
1432	MO1010123	CALHOUN	SWP	TTHM	DBPDUAL-01	JAMES BURSON-301 S HIGH ST	62.6	87.4	135	77	91	496	KCRO
1432	MO1010123	CALHOUN	SWP	HAA5	DBPDUAL-01	JAMES BURSON-301 S HIGH ST	37.6	63.5	83	36	55	496	KCRO
1432	MO1010808	URICH	SWP	TTHM	DBPDUAL-01	CITY HALL-308 MAIN STREET	Triggere	88	79	72	60	499	KCRO
1432	MO1010808	URICH	SWP	HAA5	DBPDUAL-01	CITY HALL-308 MAIN STREET	Triggere	0	0	0	0	499	KCRO
1432	MO1021117	HENRY CO PWSD 3	SWP	TTHM	DBPDUAL-01	SM1-YODER-231 NE HWY V	67.1	78.1	129	73	87	2495	KCRO
1432	MO1021117	HENRY CO PWSD 3	SWP	HAA5	DBPDUAL-01	SM1-YODER-231 NE HWY V	41.2	45.7	75	42	51	2495	KCRO
1432	MO1021117	HENRY CO PWSD 3	SWP	TTHM	DBPDUAL-02	S1-2-COUNTRY STORE-1177 NE HWY	62.1	89	100	68	80	2495	KCRO
1432	MO1021117	HENRY CO PWSD 3	SWP	HAA5	DBPDUAL-02	S1-2-COUNTRY STORE-1177 NE HWY	36.3	42.8	58	42	45	2495	KCRO
1432	MO1021175	HENRY CO PWSD 4	SWP	TTHM	DBPDUAL-01	URICH VAULT-INTERSECTION MAIN S	58.4	83.2	128	70	85	1025	KCRO
1432	MO1021175	HENRY CO PWSD 4	SWP	HAA5	DBPDUAL-01	URICH VAULT-INTERSECTION MAIN S	37.9	54.7	62	30	46	1025	KCRO
1432	MO1021175	HENRY CO PWSD 4	SWP	TTHM	DBPDUAL-02	MASTER METER-BOOSTER PUMP STA	56.2	92	123	68	85	1025	KCRO
1432	MO1021175	HENRY CO PWSD 4	SWP	HAA5	DBPDUAL-02	MASTER METER-BOOSTER PUMP STA	44.4	56	59	38	49	1025	KCRO

# 1Q16 MCL Violations



# Operational Evaluation Levels (OEL)

$(Q1 + Q2 + (2 \times Q3))/4 > 80/60\text{ppb} \Rightarrow$  Triggers OEL Report

10 CSR 60-4.094(7)(B)1.

“If you exceed the operational evaluation level, you must conduct an operational evaluation and submit a written report of the evaluation to the department no later than ninety (90) days after being notified of the analytical result that causes you to exceed the operational evaluation level. The written report must be made available to the public upon request.”

10 CSR 60-4.094(7)(B)2.

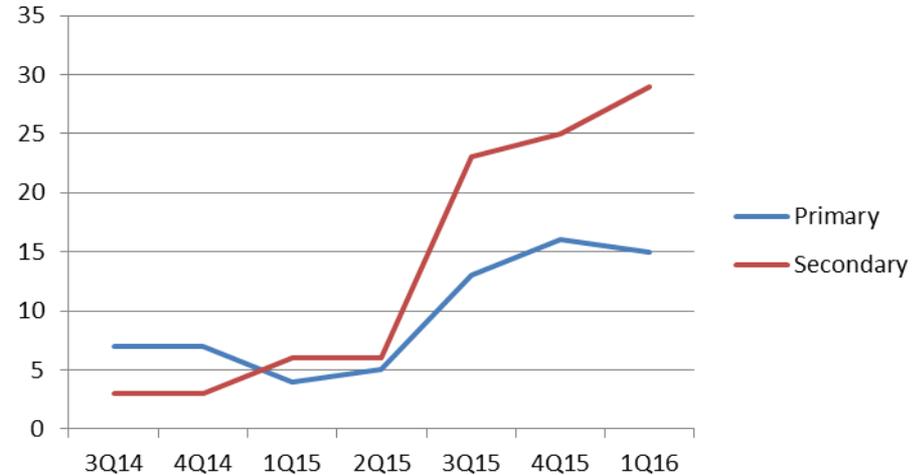
“Your operational evaluation must include **an examination of system treatment and distribution operational practices, including storage tank operations, excess storage capacity, distribution system flushing, changes in sources or source water quality, and treatment changes or problems** that may contribute to TTHM and HAA5 formation and what steps could be considered to minimize future exceedences.”



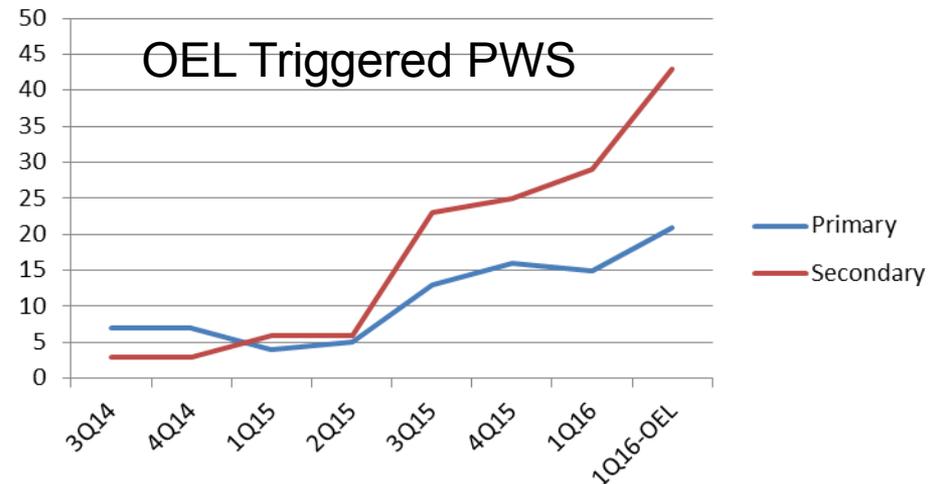
# 1Q16 MCL vs OEL Triggers

	Primary	Secondary
3Q14	7	3
4Q14	7	3
1Q15	4	6
2Q15	5	6
3Q15	13	23
4Q15	16	25
1Q16	15	29
1Q16-OEL	21	43

MCL Vios Issued



OEL Triggered PWS





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# **Stage 2 Disinfectants and Disinfection Byproducts Rule (Stage 2 D/DBPR) and Consecutive Systems (continued)**

## *Questions*

**Eric Medlock**

Chemical Monitoring Coordinator  
Public Drinking Water Branch

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**Email: [eric.medlock@dnr.mo.gov](mailto:eric.medlock@dnr.mo.gov)**

Safe Drinking Water Commission

Department of Natural Resources  
Division of Environmental Quality  
Water Protection Program  
Public Drinking Water Branch  
July 12, 2016

**Annual Compliance Report**

**Background:**

The Public Drinking Water Branch is required by Section 1414(c)(3) of the Safe Drinking Water Act of 1996 to complete an annual compliance report. The report contains violation data for the previous calendar year and is due to the U.S. Environmental Protection Agency (EPA) by July 1st. This report is available to the general public on Missouri Department of Natural Resources website at <http://dnr.mo.gov/env/wpp/fyreports/index.html>.

**Presentation:**

This information will be provided in your notebooks.

**Recommendation:**

Information only.



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# Annual Compliance Report

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Misty Lange

- Annual report required by Section 1414(c)(3)(A)(i-ii) of the Safe Drinking Water Act of 1996
- Due to the U.S. Environmental Protection Agency (EPA) by July 1<sup>st</sup>
- Violation data for previous calendar year

# Violation data

- Maximum contaminant level (MCL)
- Maximum residual disinfectant level (MRDL)
- Treatment technique requirement (TT)
- Significant monitoring & reporting (M/R)
- Variance & exemption
- Recordkeeping
- Significant public notification
- Significant Consumer confidence report (CCR) notification

# Compliance Report Categories

- Volatile organic compounds (VOCs)
- Synthetic organic compounds (SOCs)
- Inorganic chemicals (IOCs)
- Nitrate
- Radionuclides
- Lead & Copper Rule (LCR)
- Total Coliform Rule (TCR)
- Surface Water Treatment Rule (SWTR)
- Disinfectant & Disinfection By-Product Rule (DBPR)
- Groundwater Rule (GWR)

# Public Water Systems by type:

Community: 1427, 52%

Nontransient Noncommunity: 1089, 40%

Transient Noncommunity: 216, 8%

Total systems in 2015: 2732

# Source of Water

(Percent of Population served by Public Water Systems)

Missouri River: 47.30%

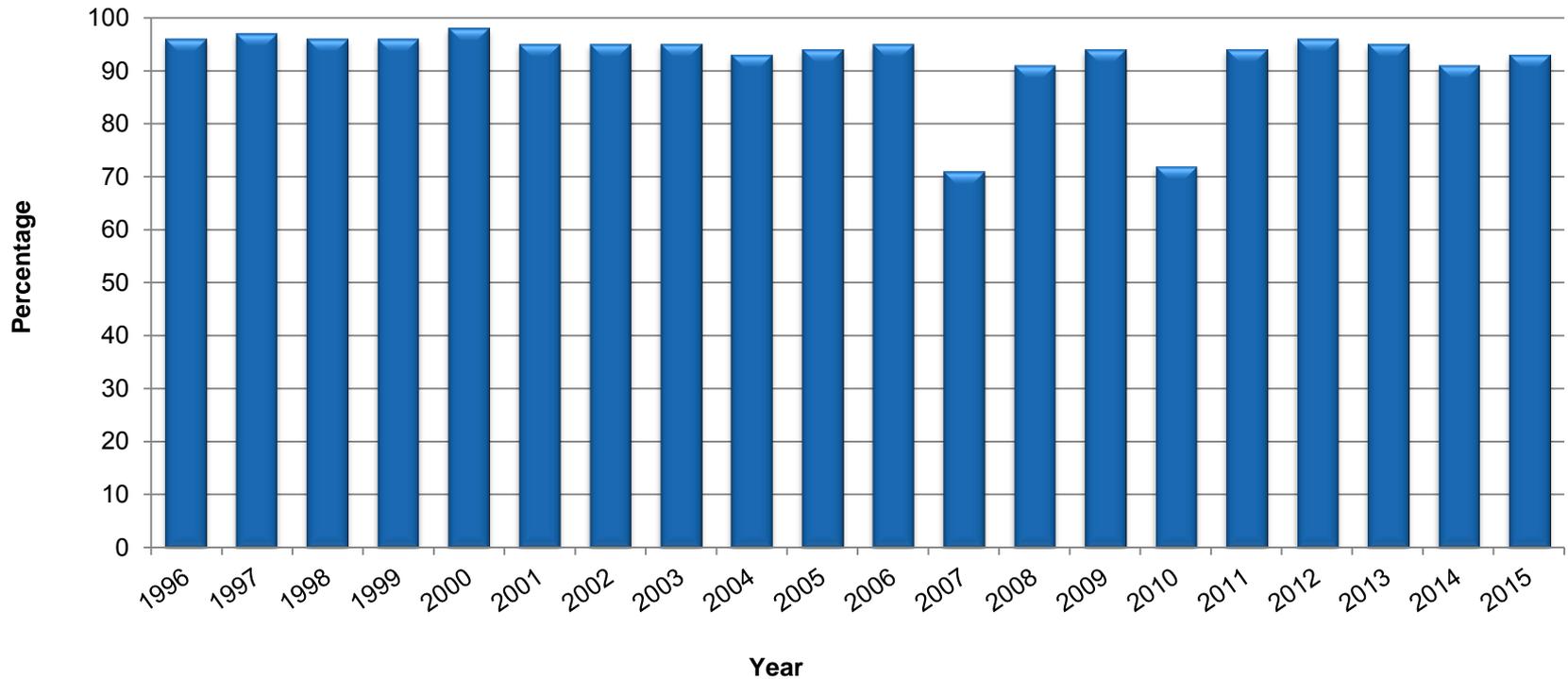
Mississippi River: 1.34%

Other surface water: 12.40%

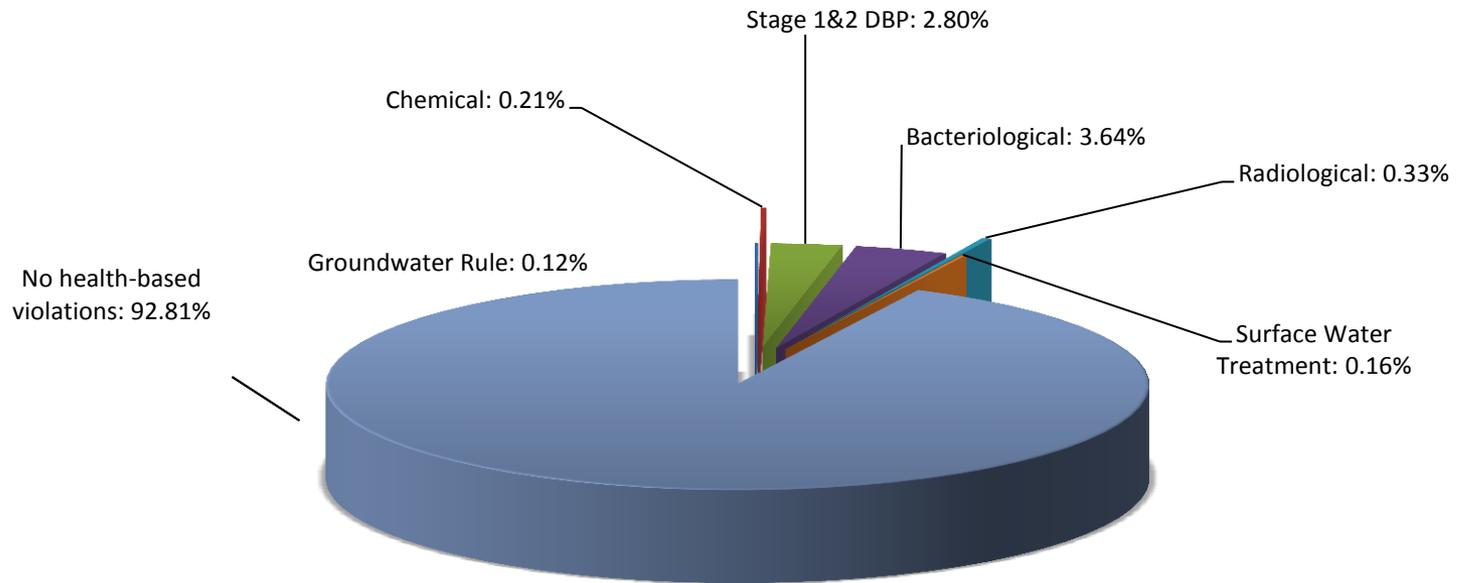
Groundwater: 38.96% (includes alluvial wells)



## Drinking Water Trends Community Systems: Population Served Meeting All Health-based Requirements

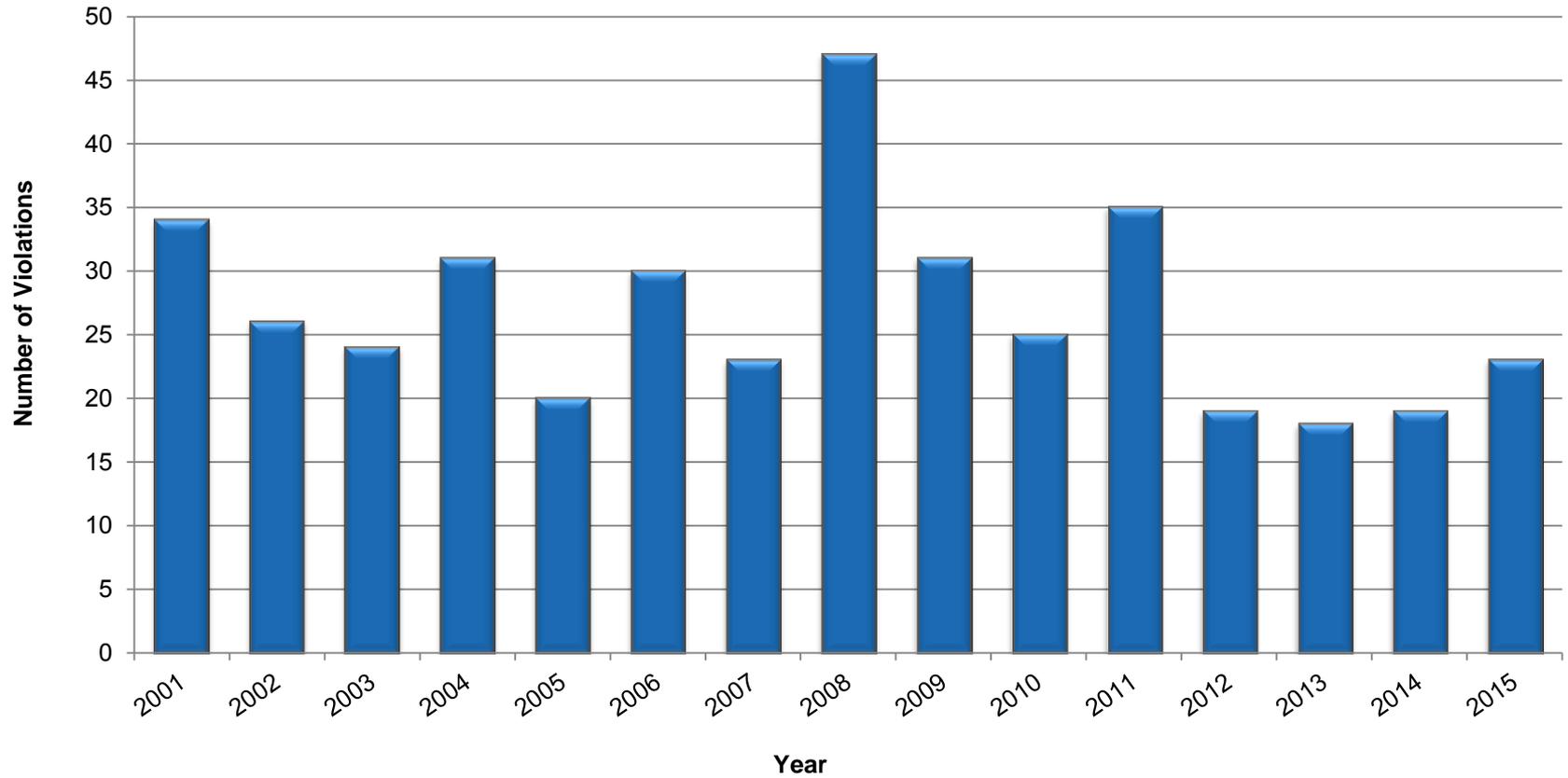


## Percent Population of Community Water Systems in Violation of Health-based Standards

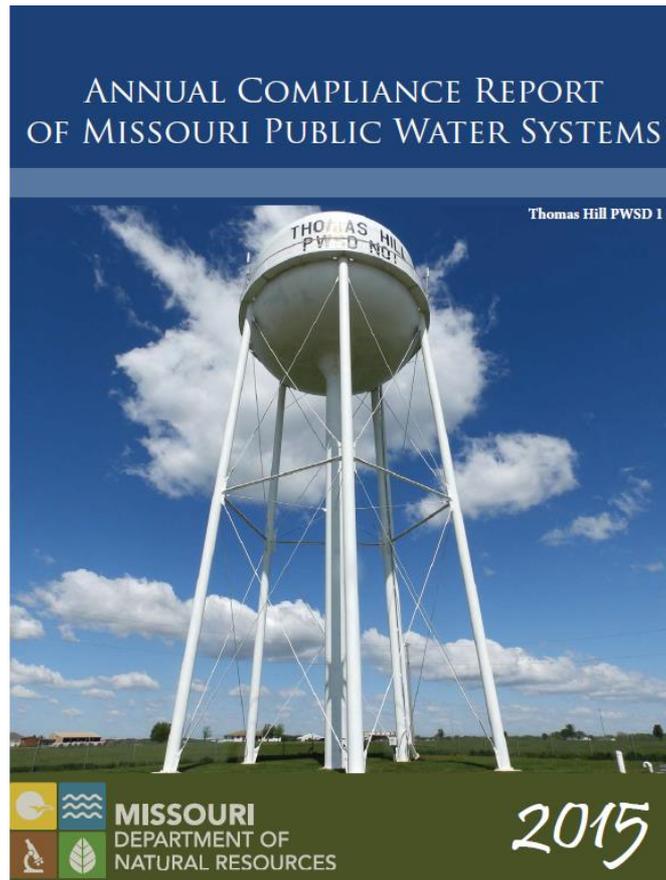




## E. Coli Acute MCL Violations



<http://dnr.mo.gov/env/wpp/fyreports/index.html>





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# Questions?

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