Consumer Confidence Reports (CCRs)

2016 Online Workshops

RURAL COMMUNITY ASSISTANCE CORPORATION

RCAC

CALIFORNIA Water Boards

STATE WATER RESOURCES CONTROL BOARD

REGIONAL WATER QUALITY CONTROL BOARDS

WELCOME!

This training is presented by RCAC with funding provided by the California State Water Resources Control Board Division of Drinking Water (DDW)

This document was prepared using funds under Agreement 15-017-550 with the California State Water Resources Control Board; the total Agreement is for $3,971,379 and will produce multiple documents

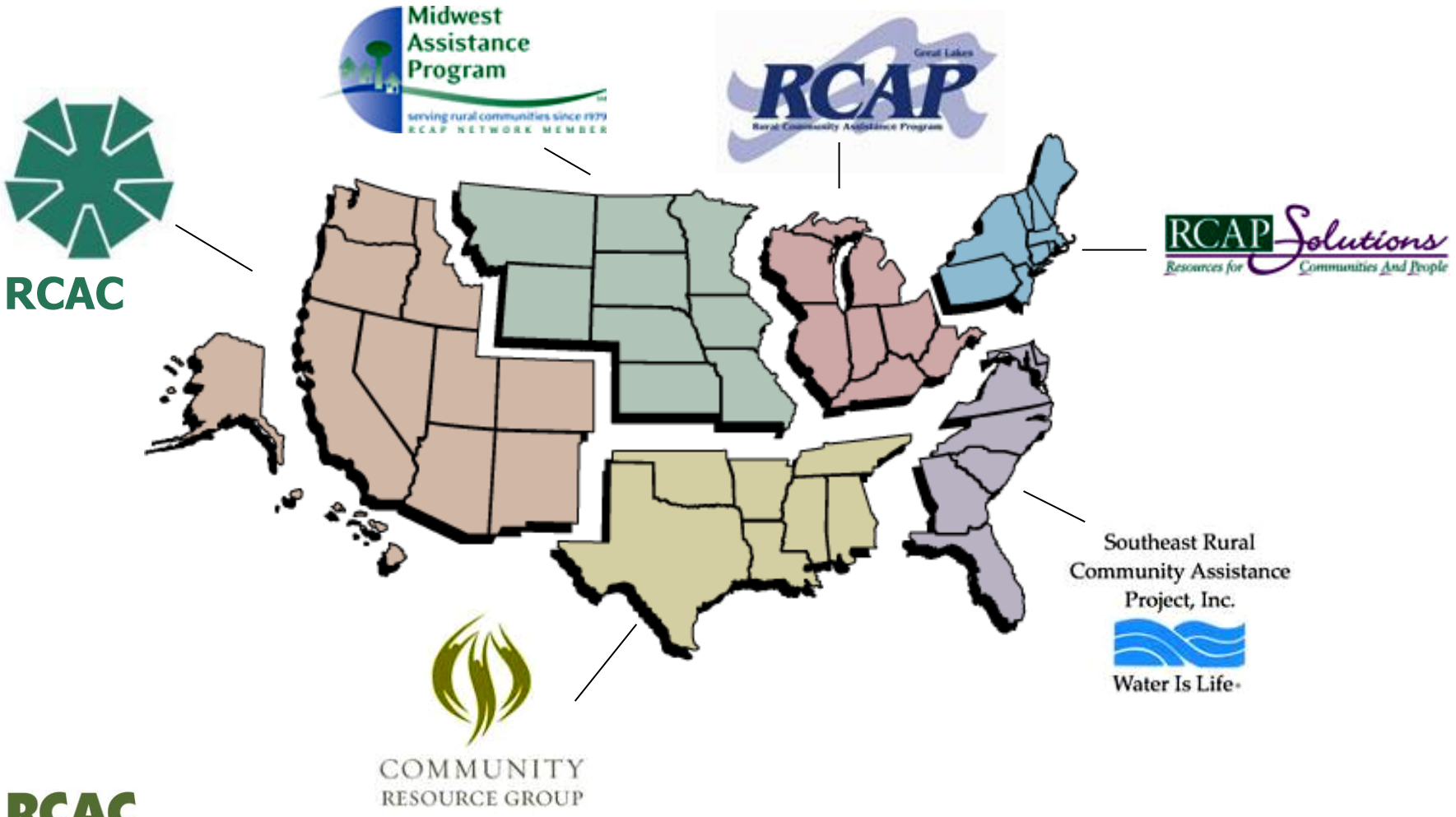
RCAC
www.rcac.org

CALIFORNIA
Water Boards
STATE WATER RESOURCES CONTROL BOARD
REGIONAL WATER QUALITY CONTROL BOARDS

Your Moderator Today…

Mike Boyd
Gering NE
mboyd@rcac.org

The Rural Community Assistance Partnership



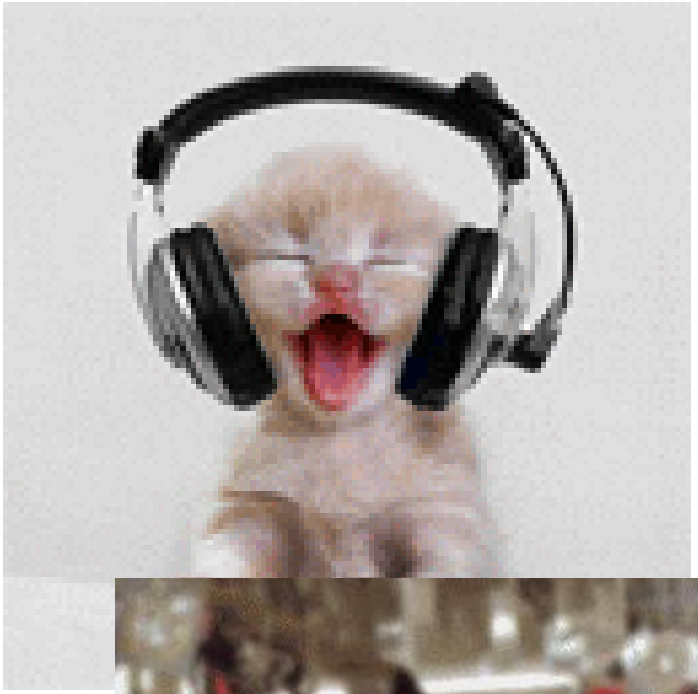
RCAC Programs

- Affordable housing
- Community facilities
- Water and wastewater infrastructure financing (Loan Fund)
- Classroom and online training
- On-site technical assistance
- Median Household Income (MHI) surveys

Performance Assessment Rating Tool (PART)

- 4 to 6 weeks from today
- Email w/ today's workshop in subject line
- 2 questions – 3 minutes maximum
- How did you use the information that was presented today?
- Funders are looking for positive changes
- Help us continue these free workshops!

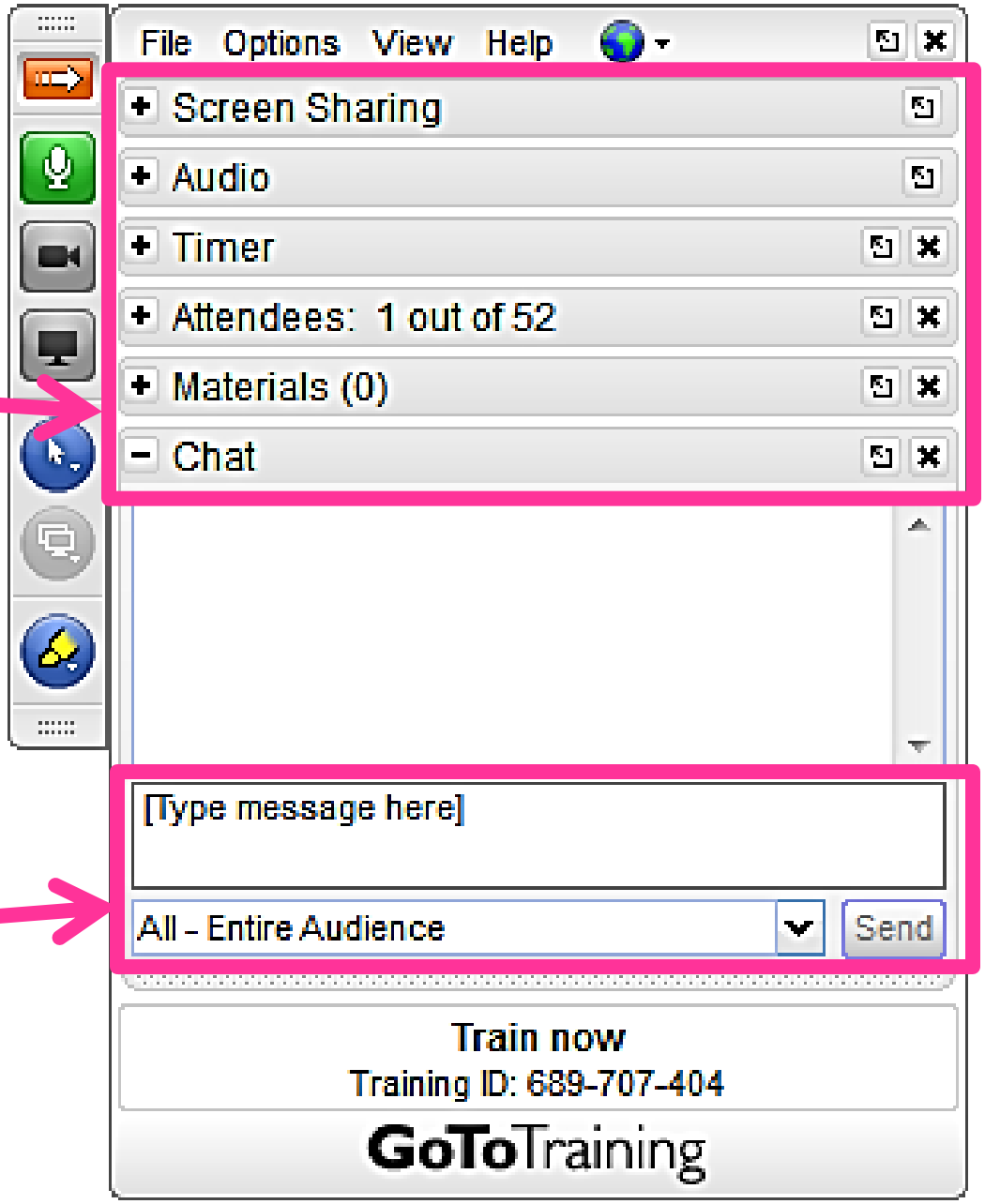
Let's Rock And Roll!



RCAC.org

Control Tabs

Chat Box – Send to "Entire Audience"

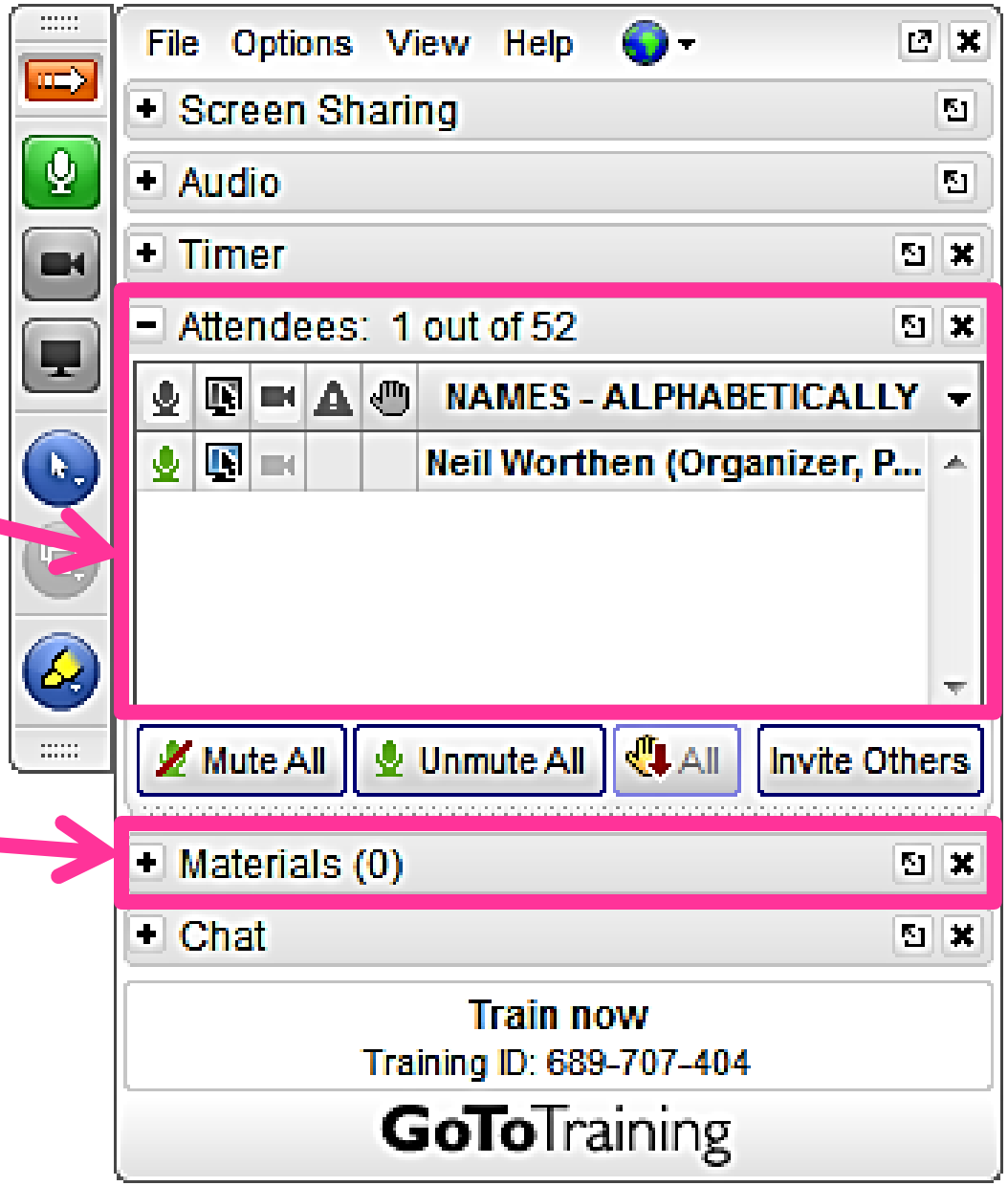


Audio Controls

RCAC.org

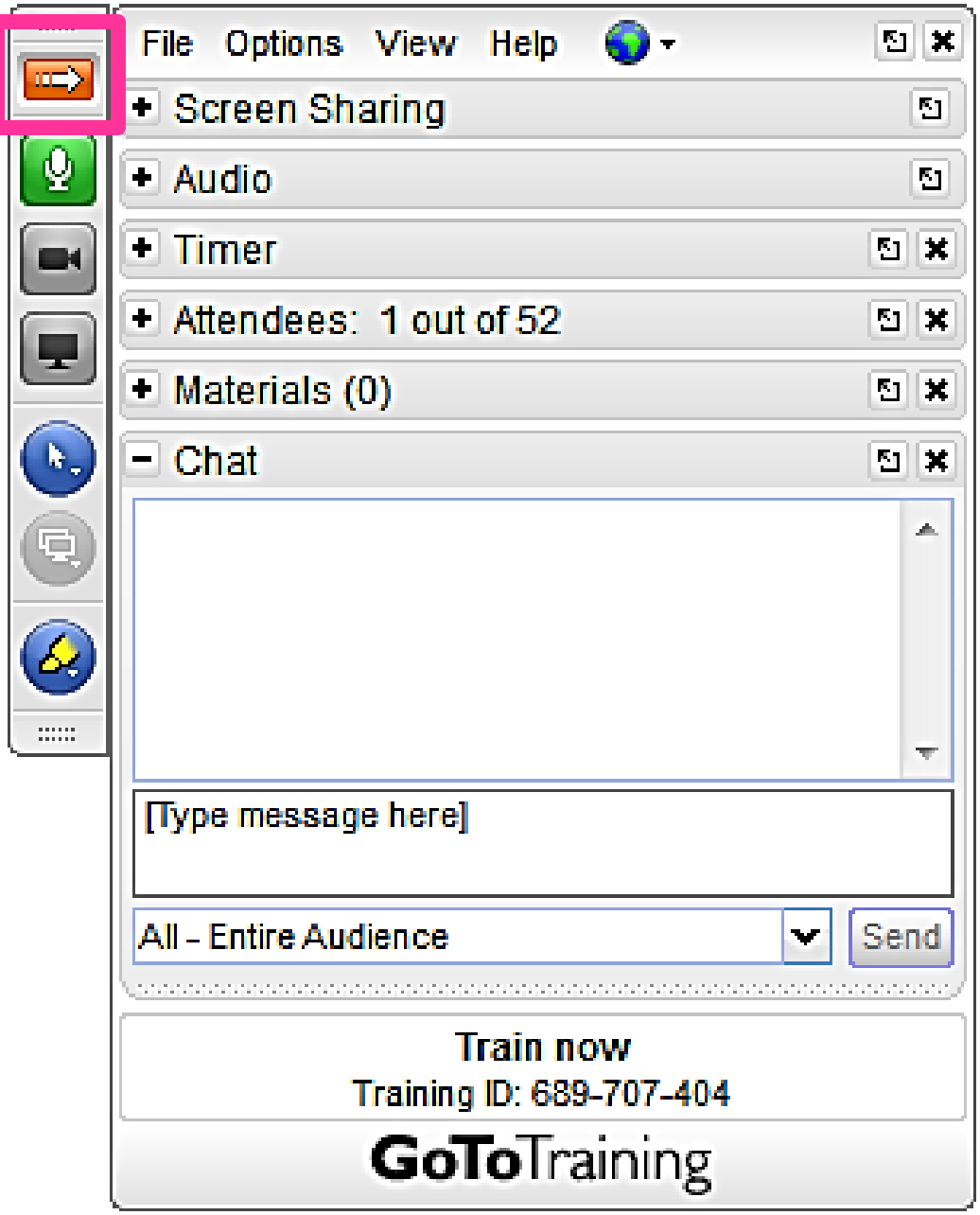
Attendee List

Today's Materials



RCAC.org

Hide/Restore Control Panel



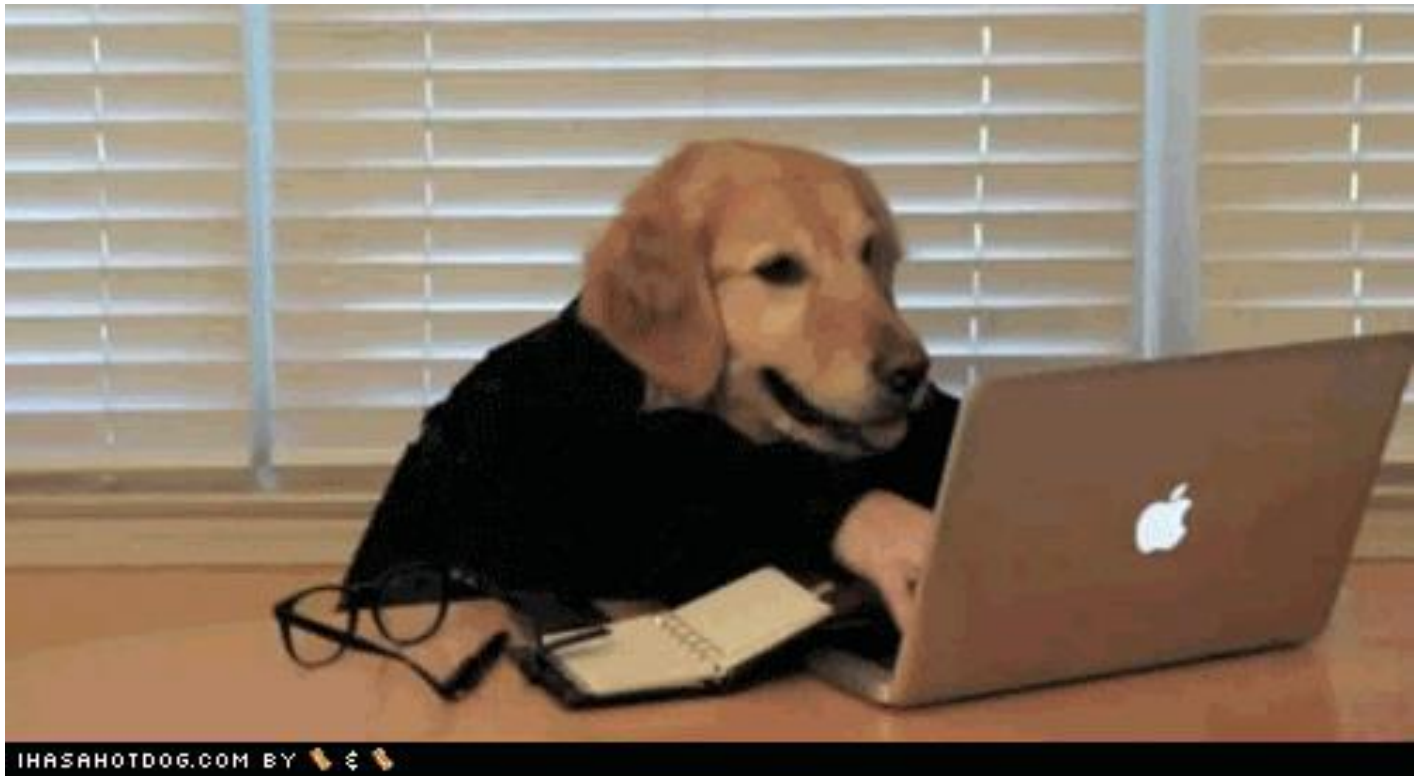
Where is my Workshop Brochure?

- If you registered for a training in the last two years ***no action is required***
- If you have not registered via RCAC's website for a training in the last two years go to: ***www.rcac.org/trainings/registration-help*** and set up an account
- It's easy!

Where is my Certificate For Contact Hours?

- Certificates for training hours can be downloaded and self-printed
- Go to ***www.rcac.org/trainings/registration-help***
  and set up an account
- It's easy!
- Starting in 2016 certificates for ***online*** training hours will not be mailed

Questions?



Text your questions and comments anytime during the session

RCAC.org

Your Presenter Today…

Neil Worthen
Las Cruces, NM

nworthen@rcac.org

Consumer Confidence Reports (CCRs)

2016 Online Workshops

RURAL COMMUNITY ASSISTANCE CORPORATION

RCAC

CALIFORNIA Water Boards

STATE WATER RESOURCES CONTROL BOARD

REGIONAL WATER QUALITY CONTROL BOARDS

Poll Time!

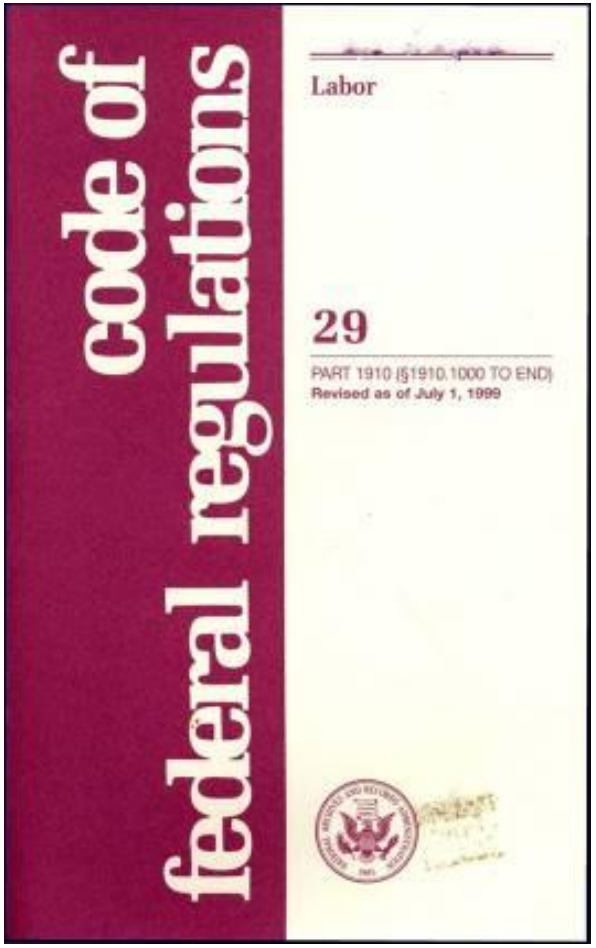
Question 1: Who’s here today?

Poll Time!

Question 2: If you answered “other”....

Why Consumer Confidence Reports?

- Required by 1996 SDWA amendments
- Public Right to know emphasized
- Became California Law in 2001

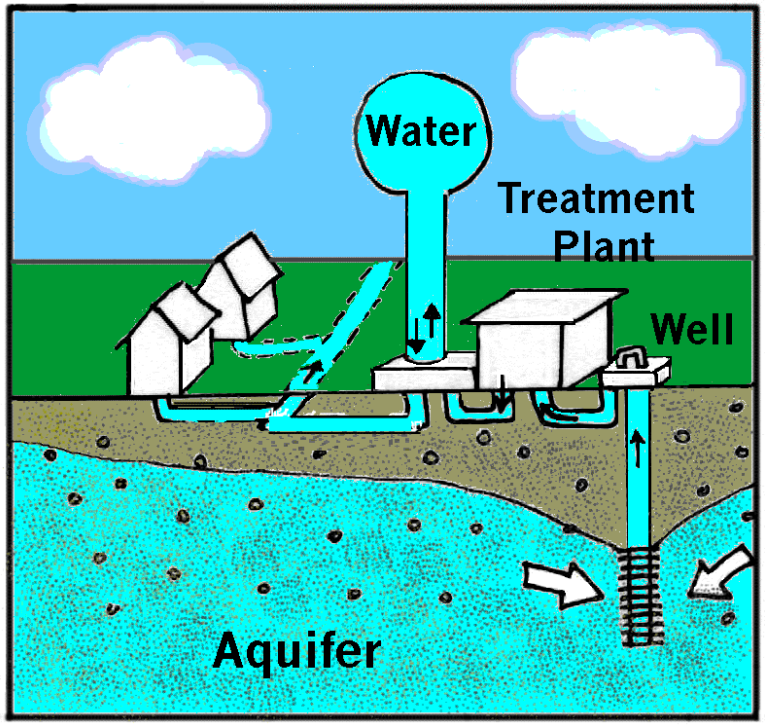


Why Should My Customers Have This Information?

- Allows consumers to make informed decisions about their drinking water
- Encourages dialogue between consumers & utility
- Starting point for consumers to get info
- Raise consumers awareness of
  - Drinking water source
  - Drinking water treatment and delivery

Who Does This Apply To?

- Community Water Systems (CWSs)
- Nontransient Noncommunity Water Systems (NTNCWSs)



Overview

- Key dates
- Report content requirements
- Report delivery requirements
- Recordkeeping requirements

Important Dates

- CCR delivery by July 1 of each year
- Copy to primacy agency by July 1 of each year
- ***Certification*** to primacy agency by October 1

Certification To The State

- The certification states that…
  - The CCR has been distributed to customers
  - The data is correct and complies with state requirements

Water Wholesalers

- By April 1 of each year - provide WQ data to retail customers
  - 3 months before CCR is due
- Any other date must be agreed upon by both parties by written contract
- Seller not responsible for distribution sampling data, i.e. DBPs, coliform, lead etc

Report Content Requirements

- Water system information
- Sources of water
- Definitions
- Levels of ***detected*** contaminants

Report Content Requirements

- Info on cryptosporidium, radon and other contaminants
- Violations of any drinking water regulations
- Variances or exemptions
- Health effects information

Where To Begin? How About The State Template?

2015 Consumer Confidence Report

Water System Name:		Report Date:	

We test the drinking water quality for many constituents as required by state and federal regulations. This report shows the results of our monitoring for the period of January 1 - December 31, 2015 and may include earlier monitoring data.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo ó hable con alguien que lo entienda bien.

Type of water source(s) in use:	
Name & general location of source(s):	
Drinking Water Source Assessment information:	
Time and place of regularly scheduled board meetings for public participation:	
For more information, contact:	Phone: ( )

TERMS USED IN THIS REPORT

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs (or MCLGs) as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Contaminant Level Goal (MCLG): The

Primary Drinking Water Standards (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Secondary Drinking Water Standards (SDWS): MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminants with SDWSs do not affect the

Page One

- System name and date
- Non English speaking notice
  - Primacy agency determines necessity
  - All languages available, just ask

Page One (cont.)

- Type of source
- Name & location of source
- Source assessment information (if any)
  - Date completed
  - Where it is
  - Any vulnerabilities
- Time & place of public meetings (if any)
- For more information, please contact…

Terms Used in This Report - Required

- Maximum Contaminant Level (MCL)
- Maximum Contaminant Level Goal (MCLG)
- Public Health Goal (PHG)
- Primary Drinking Water Standards
- Maximum Residual Disinfectant Level (MRDL)
- Maximum Residual Disinfectant Level Goal

Terms Required If You Report An Applicable Detected Contaminant...

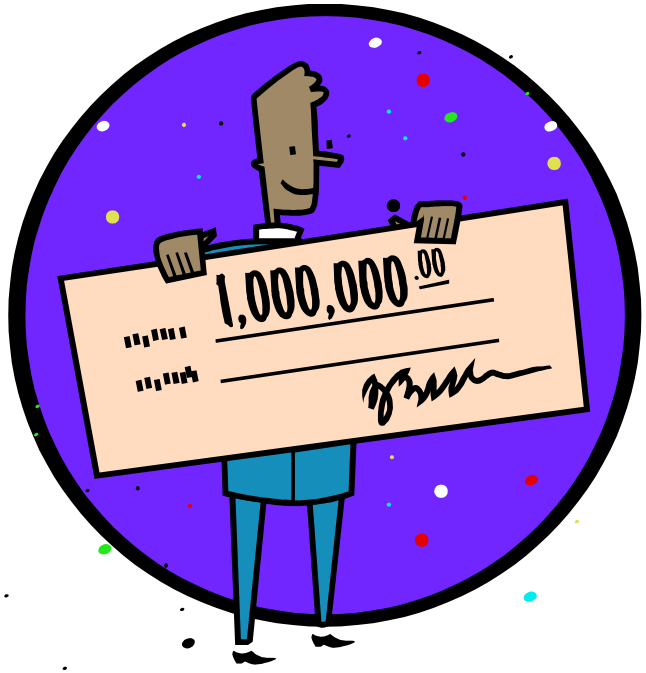
- Regulatory Action Level (AL)
- Treatment Technique (TT)

AND/OR...

- Variance or exemption, ***only*** if your system is operating under a variance or exemption

Terms & Definitions Required If You Use Abbreviations

- Non detectable – ND
- Parts per million – ppm
- Parts per billion – ppb
- Parts per trillion – ppt
- Picocuries per liter – pCi/L



Drinking Water Sources

- List all sources including rivers, lakes, streams, ponds, reservoirs, springs and wells
- As water travels over or through the ground…

Page 2:..... *"Oh No.... The Tables!!"*

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (complete if bacteria detected)	**Highest No. of Detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria	(In a mo.)		More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	(In the year)		A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (complete if lead or copper detected in the last sample set)	**No. of samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)				15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)				1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium (ppm)				none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)				none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

**Any violation of an MCL or AL is asterisked. Additional information regarding the violation is provided later in this report.*

Detected Contaminants Tables

- Show level of each ***detected*** contaminant during the previous…
  - **9 years** (regulated contaminants)
  - **5 years** (unregulated contaminants)
- Table must show range of levels found, if more than one sample was taken
- Only contaminants detected at or above reportable levels
- Don't include ***ND*** or below reportable level results

The Tables – Instructional Text

Tables 1, 2, 3, 4, 5, 6, 7 and 8 list all of the drinking water contaminants that were detected during the most recent sampling for the constituent. The presence of these contaminants in the water does not necessarily indicate that the water poses a health risk. The State Board allows us to monitor for certain contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of the data, though representative of the water quality, are more than one year old.

Guidance For Contaminant Tables

- Check attachments for MCL, MRDL, AL, PHG, MCLG and MRDLG levels for primary/secondary constituent entry levels (lab reports vary)
- Mandatory wording for “source of contaminant”
- MCLG bracketed with ( )
- MRDL & MRDLG bracketed with [ ]

Reporting Units

If Attachment 1 or 2 gives the MCL/MRDL/AL units in…	But your lab reported the result in units of …	Multiply the lab result by…
ppb (µg/L)	ppm (mg/L)	1,000
ppt (ng/L)	ppm (mg/L)	1,000,000
ppt (ng/L)	ppb (µg/L)	1,000

- **Example:** Chlordane was detected at 0.001 ppm (mg/L). Attachment 1 gives the MCL for chlordane as 100 ppt (ng/L). Therefore, multiply the lab result by 1,000,000 to obtain the level to be reported in CCR Table 4 (Example: 0.001 ppm x 1,000,000 = 1,000 ppt)

Questions?

Text your questions and comments anytime during the session

One Water Source

- For a water system with only one source,
  - If one sample collected last year, report in “Level Detected” column
  - Do not report anything under the “Range of Detection” column
  - If more than one sample collected, report the average in “Level Detected” and range under “Range of Detections”

Multiple Sources

- If multiple sources were sampled last year,
  - Report average under “Level Detected” & enter range under “Range of Detections”
  - If more than one source enters distribution system at a single point, you MAY use ***flow weighted average*** under “Level Detected”

Multiple Sources

- Multiple sources where at least one source sampled more than once last year,
  - If multiple samples collected, average for the next step
  - One sample taken, use it for the next step
- Report averages in **“Level Detected”**
- Enter ranges in **“Range of Detection”**
- Both enter distribution system same location, average it under **“Level Detected”**

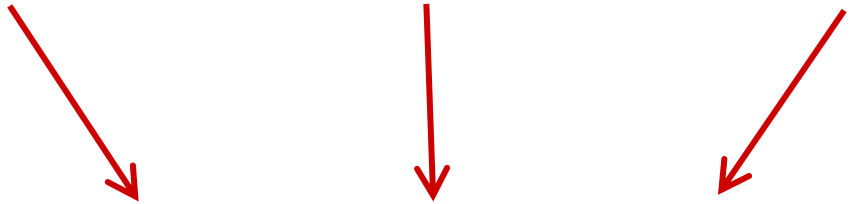
Example of *"Flow-Weighted Averaging"*

Average levels detected:

Well 1 = **60** ppb Well 2 = **46** ppb Well 3 = **8** ppb

Overall average (reportable as "Level Detected") = **38 ppb**

Contribution to flow – **Well 1 = 20% Well 2 = 35% Well 3 = 45%**



$$\text{Weighted average} = \frac{60\,(0.20) + 46\,(0.35) + 8\,(0.45)}{3}$$

Flow-Weighted average (reportable as "Level Detected") = **11 ppb**

RCAC
www.rcac.org

Table 1: Coliform Bacteria

TABLE 1 – SAMPLING RESULTS SHOWING THE DETECTION OF COLIFORM BACTERIA					
Microbiological Contaminants (complete if bacteria detected)	**Highest No. of Detections**	**No. of months in violation**	**MCL**	**MCLG**	**Typical Source of Bacteria**
Total Coliform Bacteria	(In a mo.)		More than 1 sample in a month with a detection	0	Naturally present in the environment
Fecal Coliform or *E. coli*	(In the year)		A routine sample and a repeat sample detect total coliform and either sample also detects fecal coliform or *E. coli*	0	Human and animal fecal waste

Table 2: Lead & Copper

TABLE 2 – SAMPLING RESULTS SHOWING THE DETECTION OF LEAD AND COPPER						
Lead and Copper (complete if lead or copper detected in the last sample set)	**No. of samples collected**	**90th percentile level detected**	**No. sites exceeding AL**	**AL**	**PHG**	**Typical Source of Contaminant**
Lead (ppb)				15	0.2	Internal corrosion of household water plumbing systems; discharges from industrial manufacturers; erosion of natural deposits
Copper (ppm)				1.3	0.3	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Table 3: Sodium and Hardness

TABLE 3 – SAMPLING RESULTS FOR SODIUM AND HARDNESS						
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**MCL**	**PHG (MCLG)**	**Typical Source of Contaminant**
Sodium (ppm)				none	none	Salt present in the water and is generally naturally occurring
Hardness (ppm)				none	none	Sum of polyvalent cations present in the water, generally magnesium and calcium, and are usually naturally occurring

Tables 4 & 5: Primary and Secondary Standards

TABLE 4 – DETECTION OF CONTAMINANTS WITH A PRIMARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL [MRDL]	PHG (MCLG) [MRDLG]	Typical Source of Contaminant

TABLE 5 – DETECTION OF CONTAMINANTS WITH A SECONDARY DRINKING WATER STANDARD						
Chemical or Constituent (and reporting units)	Sample Date	Level Detected	Range of Detections	MCL	PHG (MCLG)	Typical Source of Contaminant

Disinfection Byproducts (TTHM & HAA_5)

- Compliance is determined on a locational running annual average (LRAA) by calculating a LRAA for each monitoring location
- Report the highest 2015 LRAA in the *Level Detected* column
- Enter the range of sample results from all 2015 samples in the *Range of Detections* column
- If the LRAA was exceeded in 2015, report the LRAA for all locations that exceeded the MCL in the *Level Detected* column

Table 6: Unregulated Contaminants

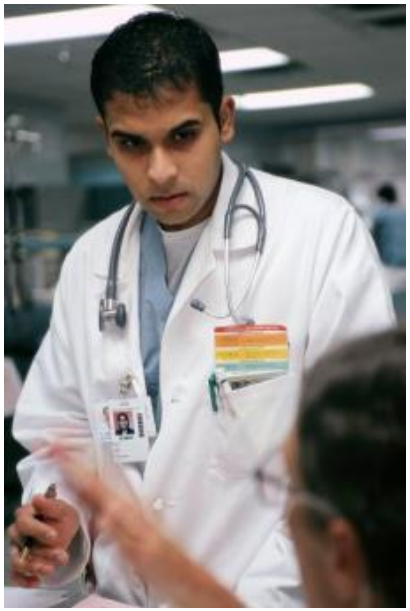
TABLE 6 – DETECTION OF UNREGULATED CONTAMINANTS					
Chemical or Constituent (and reporting units)	**Sample Date**	**Level Detected**	**Range of Detections**	**Notification Level**	**Health Effects Language**

Treating for Chemical Contaminants

- Report highest level detected **after** treatment in “Level Detected” column
- Enter range of all **after**-treatment results in “Range of Detection” column

Additional Information on Drinking Water

- EPA hotline
- Advise people with health issues to speak to their doctors if the following is a concern,
  - AIDS patients
  - Elderly or infants
  - Chemotherapy patients
  - Organ transplant



Special Language for Nitrate, Arsenic, Lead & Surface Water

- Nitrate (as N) = above 5 mg/L, but below 10 mg/L
- Arsenic = above 5 ppb up to and including 10 ppb
- Lead = above action level in 5% up to and including 10% of samples
  - If system samples less than 20 sites and has even one above AL, use special language
- Surface water system = inadequate treatment or a violation

Special Language for Radon and Cryptosporidium

- Radon = if detected the results and significance included
  - Further explanation “may” be used if desired
- Cryptosporidium in source or treated water = must report results and significance
  - Further explanation “may” be used if desired

Summary Information

- Required for contaminants exceeding MCL, MRDL, AL, treatment technique or monitoring and reporting requirement
- Applies to primary and secondary standards
- List potential health affects for primary violations (state provides mandatory language)
- Explain if exceeding secondary standards (example provided)

Table 7: Ground Water Rule

For Water Systems Providing Ground Water as a Source of Drinking Water

TABLE 7 – SAMPLING RESULTS SHOWING FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLES					
Microbiological Contaminants (complete if fecal-indicator detected)	**Total No. of Detections**	**Sample Dates**	**MCL [MRDL]**	**PHG (MCLG) [MRDLG]**	**Typical Source of Contaminant**
E. coli	(In the year)		0	(0)	Human and animal fecal waste
Enterococci	(In the year)		TT	n/a	Human and animal fecal waste
Coliphage	(In the year)		TT	n/a	Human and animal fecal waste

Summary Information for Fecal Indicator-Positive Ground Water Source Samples, Uncorrected Significant Deficiencies, or Ground Water TT

SPECIAL NOTICE OF FECAL INDICATOR-POSITIVE GROUND WATER SOURCE SAMPLE
SPECIAL NOTICE FOR UNCORRECTED SIGNIFICANT DEFICIENCIES

GWR Summary Information

- For fecal indicator-positive ground water source samples:
  - Source of fecal contamination (if known)
  - Date(s) of the fecal indicator-positive source sample
  - Whether the fecal contamination has been addressed
  - If not addressed, the DDW-approved plan and schedule for correction
  - Progress to date
  - Interim measures completed
  - Health effects language from Attachment 1

Table 8: Surface Water Systems

TABLE 8 - SAMPLING RESULTS SHOWING TREATMENT OF SURFACE WATER SOURCES	
Treatment Technique [a] (Type of approved filtration technology used)	
Turbidity Performance Standards [b] (that must be met through the water treatment process)	Turbidity of the filtered water must: 1 – Be less than or equal to _____ NTU in 95% of measurements in a month. 2 – Not exceed _____ NTU for more than eight consecutive hours. 3 – Not exceed ____ NTU at any time.
Lowest monthly percentage of samples that met Turbidity Performance Standard No. 1.	
Highest single turbidity measurement during the year	
Number of violations of any surface water treatment requirements	

(a) A required process intended to reduce the level of a contaminant in drinking water.

(b) Turbidity (measured in NTU) is a measurement of the cloudiness of water and is a good indicator of water quality and filtration performance. Turbidity results which meet performance standards are considered to be in compliance with filtration requirements.

** Any violation of a TT is marked with an asterisk. Additional information regarding the violation is provided below.*

Summary Information for Violation of a Surface Water TT

VIOLATION OF A SURFACE WATER TT				
TT Violation	**Explanation**	**Duration**	**Actions Taken to Correct the Violation**	**Health Effects Language**

Surface Water Systems

- List type of approved filtration
  - Conventional, direct filtration etc
- List turbidity performance standards for that type of filtration
- Enter highest and lowest standards you achieved
- Enter violations of surface water treatment

Summary Information for Surface Water Treatment

- If system lacks filtration/disinfection required or a violation…
  - Explanation of the violation including,
    - Duration
    - Health affects
    - Actions taken
- Contact DDW if unsure you've had TT violations

What Next?

- Add PR info (you're paying to send it anyway!)
  - General info
  - System improvements
  - Board member solicitation
  - Rate increases
- ***Get approval from primacy agency!!***
- Distribute
- Don't forget to send certification to state

Electronic Delivery

- Must meet the requirement for “direct delivery” in Section 64483(a), Title 22 of the California Code of Regulations
- A water system can choose to meet the “direct delivery” requirement by ***alternate means*** and may obtain assistance for doing so at its local DDW District Office

Electronic Delivery Options

- **Mail** – notification that CCR is available on website via a direct URL
  - Water system mails to each customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet where it can be viewed
  - The mail method for the notification may be, but is not limited to, a water bill insert, statement on the water bill or community newsletter

Electronic Delivery Options

- **Email –** direct URL to CCR
  - Water system emails to each customer a notification that the CCR is available and provides a direct URL to the CCR on a publicly available site on the Internet

Electronic Delivery Options

- **Email –** CCR sent as an attachment to the email
  - Water system emails the CCR as an electronic file email attachment (e.g., portable document format (PDF)
- **Email –** CCR sent as an embedded image in an email
  - Water system emails the CCR text and tables inserted into the body of an email (not as an attachment)

Electronic Delivery ***No-No's***

- A URL that navigates to a webpage that requires a customer to search for the CCR or enter other information
- A URL that does not take the customer to the entire CCR but requires navigation to another webpage(s)
- Use of social media (e.g., Twitter or Facebook)
- The use of automated phone calls, unless the entire content of the CCR can be provided in the phone call

SWRCB Hosting of Public Water System CCRs

- Systems must have a registered user at the Electronic Annual Reporting System web page of the DRINC Portal (eARDWP)
- Current eAR users do not need to register again
- New users can register at any time
- Once a PWS user has registered, the eAR can be completed online and the CCR uploaded
- The internet address will be displayed on the web page, which the PWS can give to its customers to see the CCR directly.
- This URL will be one click away for a water system's customers to see their CCR

Questions?

Text your questions and comments anytime during the session

RCAC.org

Thank You For Attending!

Neil Worthen
nworthen@rcac.org
Mike Boyd
mboyd@rcac.org