

2014 Boulder County General Election Post-Election Audit

Audit Process and Summary of Differences

Audit Preparation:

After the list of selected devices and races were provided by the State, the DRE was checked to verify if votes were cast on the selected devices and to confirm the applicable races appeared on the device. The selected device A0A9AE contained no votes and this was documented in the report. The selected device A0ABCO contained 10 votes and the two applicable races, therefore the VVPAT and associated MBB were pulled for audit.

The selected scanner contained 16,087 cast votes and 50 of the 54 selected races. For races that did not appear on the selected scanner, the state instructed us to record "0" on the form. In preparation for the selection of ballots by the Canvass board, we generated a list of the scanned batches, and used batch reports to include the district styles contained within the batch, providing the information necessary to confirm if applicable races appeared in the selected batches during selection. For random selection, a column was added, containing a random number formula.

Selection Process for paper ballots:

Each canvass board member called out a number between 1 and 72, and the spreadsheet was then refreshed to update the random number list. Batches associated with the random number were then checked to confirm if they held applicable race district styles. If a batch was selected that included styles already selected for audit, the batch was not included in the audit selection list and the process was repeated. This process continued until all applicable races were included in the audit. After selection was complete, the selected batches of about 150 ballots were pulled and 75 ballots were selected from the middle of each batch, ensuring the applicable district styles were included for audit, and batched into groups of 25. Each of these groups were audited.

In addition to the random selection, we had planned resources to count up to 600 ballots, in order to ensure we had enough ballots to audit the applicable races. However, selection covered applicable styles after 7 batch selections. The Canvass board therefore selected one batch to add in, that was not selected at random; batch 37.

Batch ID	Election Source	Ballots Scanned	Ballots Deleted	Ballots In Batch	DS
019	Absentee	150	0	150	DS-10 DS-12
037	Absentee	150	0	150	DS-07
056	Absentee	150	0	150	DS-12
058	Absentee	150	0	150	DS-11
060	Absentee	149	0	149	DS-04 DS-01 DS-27
098	Absentee	149	0	149	DS-11
114	Absentee	150	0	150	DS-02
117	Absentee	148	0	148	DS-02

Machine Counts:

For DRE, a new Tally database was created, the associated MBB was tabulated, and a results report was generated.

For the paper ballots, ballots had to be rescanned because the design of the system made it impossible to retrieve the original scan results for the selected ballots, and new machine results were generated. Ballots were organized in 25 ballot batches, scanned into a new database in Ballot Now, and resolved for voter intent by a Post-Election Audit Resolution team. The cast votes for each batch were written to an individual MBB and tabulated to create individual results reports for each batch. At the end of the process, all MBB were read in to create a combined results report that could be recorded on the State provided Audit report.

Manual Verification:

Bi-partisan teams were provided a batch of 25 ballots and a Manual Verification Worksheet (MVW) to record their tally. The team, after verifying they had 25 ballots, then worked one ballot at a time reading and recording the ballot selection for each race. To support creating an accurate tally, the team members would trade roles to verify the selections recorded. Once complete, a tally for each batch race was created and submitted for comparison. The information was entered into a spreadsheet, along with the machine counts and a difference column highlighted any differences.

When a difference was identified, the MVW was checked to see if a math error was the cause. If a math error was not easily determined as the cause, the discrepant batch was sent out to a separate team for a second count on the applicable contest(s), where they were instructed to identify any resolution of voter intent required and to pull those to the top of the batch. When the recount was completed, the new count was compared to see if the discrepancy was resolved. If the discrepancy was not resolved, the MVW was reviewed to see if a ballot required resolution of voter intent and the batch put aside for additional research. In some cases, the batch was also reviewed by sorting contest options into stacks and verifying that against the VMW & machine count.

In the end 5 differences remained, and the suspected ballots were noted for additional research. The Resolution window of Ballot Now was then opened, and the images were reviewed to confirm cause of discrepancy. This process resulted in confirming the suspected ballots as the cause of difference between the machine results and audit team results.

Results:

Of the 20,261 ballot contests verified, 5 differences have been confirmed. 4 of the 5 differences were attributed to voter error, and the fifth was attributed to a mistake by the Post-Election Audit Resolution team in selecting the write-in candidate from a drop down menu during resolution. This mistake was not repeated for the other two write-in selections.

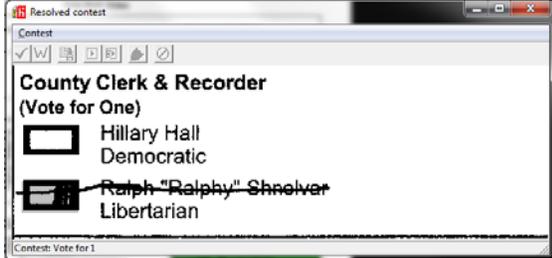
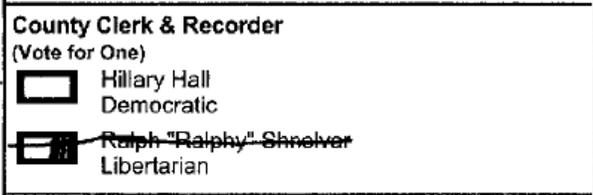
While 4 of the 5 differences were attributed to voter error, there was interest in reviewing the impacts these types of differences could have, and outcome impacts were therefore reviewed to demonstrate that no escalation was necessary.

The 5 differences make up for 0.02% of the 20,261 ballot contests audited. When this rate is applied to review the impact such differences could have on contests outcomes, and no impact was found. We therefore conclude no additional escalation is warranted.

Below are images and descriptions reflecting the difference identified.

Summary of Differences:

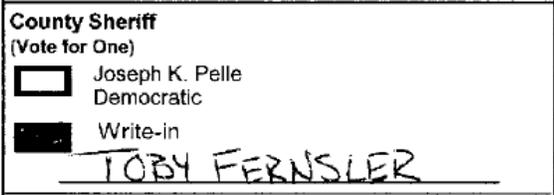
Batch 21 – County Clerk & Recorder



Voter struck out choice, without making an alternative selection. The machine counted it as a vote, while the Audit team considered it an undervote.

Contest Option	MVW Count	Machine Count	Difference
Hillary Hall	404	404	0
Ralph Shnelvar	116	117	-1
Overvote	0	0	0
Undervote	80	79	1

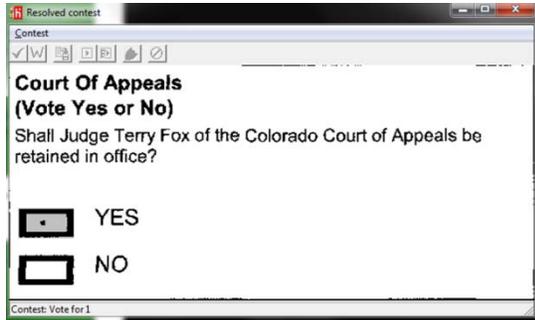
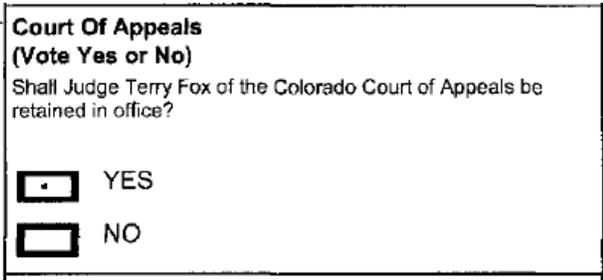
Batch 21 – County Sheriff



Vote was made for Toby Fernsler. The Audit resolution team selected "Uncertified" from the write-in drop down menu in error. The Audit team resolved it as a vote for Toby Fernsler.

Contest Option	MVW Count	Machine Count	Difference
Joseph K. Pelle	424	424	0
Toby Fernsler (W)	3	2	1
Overvote	0	0	0
Undervote	173	174	-1

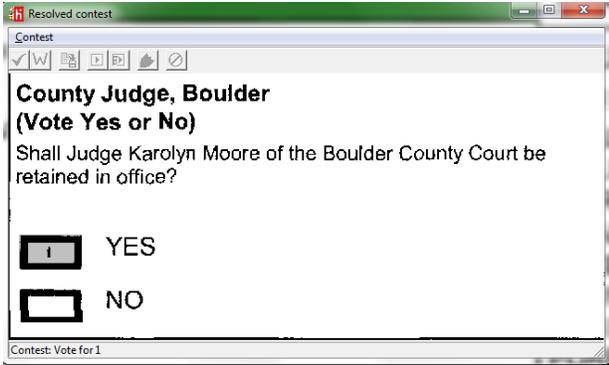
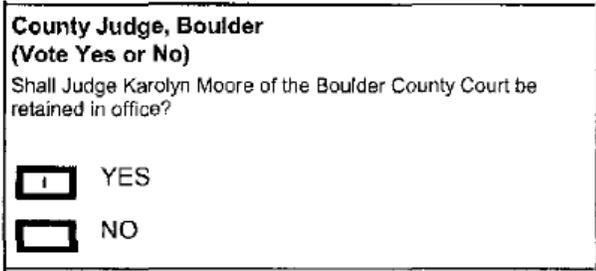
Batch 4 – Court of Appeals – Terry Fox



Judge races contain a pen rest in the target areas. The machine counted it as a vote, while the Audit team considered it an undervote.

Contest Option	MVW Count	Machine Count	Difference
YES	304	305	-1
NO	104	104	0
Overvote	0	0	0
Undervote	192	191	1

Batch 4 – County Judge, Boulder - Karolyn Moore



Judge races contain a pen rest in the target areas. The machine counted it as a vote, while the Audit team considered it an undervote.

Contest Option	MVW Count	Machine Count	Difference
YES	240	241	-1
NO	184	184	0
Overvote	0	0	0
Undervote	176	175	1

Batch 4 – Boulder County Ballot Issue 1A

**BOULDER COUNTY BALLOT ISSUE 1A
(County-wide Flood Recovery Sales and Use Tax)**
 SHALL BOULDER COUNTY TAXES BE INCREASED \$9.8 MILLION ANNUALLY (FIRST FULL FISCAL YEAR DOLLAR INCREASE STARTING IN 2015) AND BY SUCH AMOUNTS AS ARE RAISED ANNUALLY THEREAFTER THROUGH DECEMBER 31, 2019, FROM AN ADDITIONAL COUNTY-WIDE SALES AND USE TAX OF 18.5 HUNDREDTHS OF ONE PERCENT (0.185%), FOR THE PURPOSE OF PAYING FOR THE RECOVERY FROM THE 2013 FLOOD, INCLUDING: REPAIRING DAMAGED COUNTY ROADS AND BRIDGES IN A WAY THAT REDUCES THE RISK OF FUTURE FLOOD DAMAGE, RESTORING AREAS WASHED OUT BY THE FLOODING, RE-ROUTING THOSE RIVERS WHOSE COURSE WAS CHANGED BY THE FLOOD IN ORDER TO REDUCE THE RISK OF FUTURE FLOODING, ASSISTING PROGRAMS THAT REBUILD RESIDENTS' HOMES AND BUSINESSES, REDUCING THE IMPACT ON LOW INCOME AND OTHER RESIDENTS ESPECIALLY IMPACTED BY THE FLOOD, AND OTHER FLOOD RECOVERY MEASURES; AND SHALL THE REVENUES AND EARNINGS ON INVESTMENT OF THE PROCEEDS OF SUCH TAX AUTHORIZED BY THIS BALLOT ISSUE, REGARDLESS OF AMOUNT, CONSTITUTE A VOTER-APPROVED REVENUE CHANGE; ALL AS MORE PARTICULARLY SET FORTH IN BOARD OF COUNTY COMMISSIONERS' RESOLUTION NO. 2014-66?

YES
 NO

**BOULDER COUNTY BALLOT ISSUE 1A
(County-wide Flood Recovery Sales and Use Tax)**
 SHALL BOULDER COUNTY TAXES BE INCREASED \$9.8 MILLION ANNUALLY (FIRST FULL FISCAL YEAR DOLLAR INCREASE STARTING IN 2015) AND BY SUCH AMOUNTS AS ARE RAISED ANNUALLY THEREAFTER THROUGH DECEMBER 31, 2019, FROM AN ADDITIONAL COUNTY-WIDE SALES AND USE TAX OF 18.5 HUNDREDTHS OF ONE PERCENT (0.185%), FOR THE PURPOSE OF PAYING FOR THE RECOVERY FROM THE 2013 FLOOD, INCLUDING: REPAIRING DAMAGED COUNTY ROADS AND BRIDGES IN A WAY THAT REDUCES THE RISK OF FUTURE FLOOD DAMAGE, RESTORING AREAS WASHED OUT BY THE FLOODING, RE-ROUTING THOSE RIVERS WHOSE COURSE WAS CHANGED BY THE FLOOD IN ORDER TO REDUCE THE RISK OF FUTURE FLOODING, ASSISTING PROGRAMS THAT REBUILD RESIDENTS' HOMES AND BUSINESSES, REDUCING THE IMPACT ON LOW INCOME AND OTHER RESIDENTS ESPECIALLY IMPACTED BY THE FLOOD, AND OTHER FLOOD RECOVERY MEASURES; AND SHALL THE REVENUES AND EARNINGS ON INVESTMENT OF THE PROCEEDS OF SUCH TAX AUTHORIZED BY THIS BALLOT ISSUE, REGARDLESS OF AMOUNT, CONSTITUTE A VOTER-APPROVED REVENUE CHANGE; ALL AS MORE PARTICULARLY SET FORTH IN BOARD OF COUNTY COMMISSIONERS' RESOLUTION NO. 2014-66?

YES
 NO

Desel User

Contest: Vote for 1

Voter marked more than one target area. The Audit resolution team resolved it as a NO vote, while the Audit team considered it an overvote.

Contest Option	MVW Count	Machine Count	Difference
YES	240	241	-1
NO	184	184	0
Overvote	0	0	0
Undervote	176	175	1