

# County of Santa Cruz

## COUNTY CLERK / ELECTIONS

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GAIL L. PELLERIN, COUNTY CLERK

January 12, 2006

AGENDA: January 24, 2006

BOARD OF SUPERVISORS  
 County of Santa Cruz  
 701 Ocean Street, 5<sup>th</sup> Floor  
 Santa Cruz, CA 95060

### COUNTY CLERK REPORT ON CONDUCTING A 10% MANUAL RECOUNT OF ELECTRONIC VOTES

Dear Members of the Board:

On October 18, 2005, your Board requested the County Clerk to report back on a proposal to conduct a 10% rather than 1% manual recount of votes cast on the new proposed touch screen (Digital Recording Electronic or DRE) voting devices proposed to be used for elections conducted in 2006.

Attached is the report on the Board's request and a recommendation from the County Clerk that 10 percent of the DREs used for the next countywide election for voters to cast and count their votes be manually recounted and confirmed before final certification of the votes cast. It is anticipated that not more than 50 votes will be cast on each of the DREs and approximately 160 will be used in a countywide election. Therefore, the report indicates 10% or 16 of the DREs used will be manually recounted from the Voter Verifiable Paper Audit Trail attached to the electronic device. This proposal will cost approximately \$1,800.

It is therefore recommended that your Board accept and file the Manual Recount of Direct Record Electronic (DRE) Voting Devices report calling for a 10% manual recount of votes cast and counted on DREs used in the next countywide election and request that the County Clerk return after conducting such a recount with a recommendation for similar recounts in future elections.

Sincerely,

Gail L. Pellerin  
 County Clerk

RECOMMENDED

SUSAN A. MAURIELLO  
 County Administrative Officer

## Manual Recount of Direct Recording Electronic (DRE) Voting Devices

### Summary

The Board of Supervisors asked the County Clerk to report on the practical experience of states and other counties with 10 percent manual recount as part of the canvass process to measure the integrity of the new electronic voting system, specifically the DRE/touch screen devices.

It was found that there is limited experience with manual recounts of DREs in California because the Voter Verified Paper Audit Trail (VVPAT) requirement went into effect January 1, 2006 and there are no voting systems certified for use in California that have a VVPAT. Connecticut has passed legislation to count 10 percent to 20 percent of their DREs in 2006, while Colorado will continue to audit 1 percent of the DREs and optical scan ballots. The process of auditing DREs has not been defined, and there is limited practical experience, and limited information on how to accomplish a manual count of the VVPAT.

Based on the analysis of other California counties and other states, the Santa Cruz County Clerk recommends that the County count 10 percent of the ballots cast and counted on DREs used in the next countywide election. All ballots from 10 percent of the machines will be manually recounted. Therefore, if 160 machines are used at the polls, 16 will be manually recounted. In addition, the County Clerk will continue to conduct the 1 percent manually recount of all paper ballots cast at the polls. This program will require additional resources, time and finances as outlined below.

### Discussion

Currently Santa **Cruz** County adheres to the California Election Code Section 15360 as described below:

#### California Elections Code Section 15360. One Percent Manual Tally

During the official canvass of every election in which a voting system is used, the official conducting the election shall conduct a public manually tally of the ballots tabulated by those devices a cast in 1 percent of the precinct chosen at random by the election officials. If 1 percent of the precincts should be less than one whole precinct, the tally shall be conducted in one precinct chosen at random by the elections official.

In addition to the 1 percent count, the election official shall, for each race not included in the initial group of precincts, count one additional precinct.

Additional precincts for the manual tally may be selected at the discretion of the election officials.

Several California counties were contacted (San Luis Obispo, Calaveras, Amador, Alameda, Sacramento, etc) and these counties will continue to adhere to the California Elections Code as described above and conduct a 1 percent manual recount.

Connecticut and Colorado were also contacted, and these states canvass differently as noted below:

- Connecticut currently votes on a lever system; along with Optical Scan machines (approved for use in CT since 2001). The lever system has been decertified for 2006. Going forward they will continue to use Optical Scan machines, along with purchasing DREs to satisfy the ADA portion of HAVA. The Legislature has mandated that each district determine what works best for the district, but they will have to audit at least 10 percent to 20 percent of the DREs per district. The registrars of the counties are not clear on how they will accomplish the mandate, and are currently concerned that it will cost a significant amount of money and manpower. The mandate is a requirement for elections conducted in 2006.
- Colorado currently audits 1 percent of the DREs and Optical scans, and will continue to do this in 2006.

Appendix A provides more details on Connecticut, while Appendix B provides more details on Colorado.

## Alternatives

Three alternative scenarios were included in the analysis conducted by the County Clerk:

1. Continue with the current legal requirement of a 1 percent manual recount. This means that 1 percent of ballots cast at the polls, whether by optical scan or DRE would be recounted. Typically, this involves the recounting of 3 complete precincts, and then each contest not included in that recount is manually recounted in one precinct. This alternative requires no additional resources.
2. Recount 5 percent of the 160 DRE machines. Ballots on 8 DRE machines will be manually recounted. This alternative would require some additional resources.
3. Recount 10 percent of the 160 DREs machines. Ballots on 16 DRE machines would be manually recounted. This alternative will require additional resources as described below.

## Recommendation

The County Clerk concurs with the Board of Supervisor's request to manually recount 10 percent of the 160 DREs as described below for the next countywide election using DREs to cast and count the votes. All ballots on 16 machines will be recounted as per the descriptions below. This alternative is manageable as long as the number of ballots cast on each DRE remains at around 50 votes. If more voters utilize the machines, it will take the County Clerk more time and money to accomplish the task of a 10 percent manual recount of DREs. Below are estimates, based on limited experience from other counties and states.

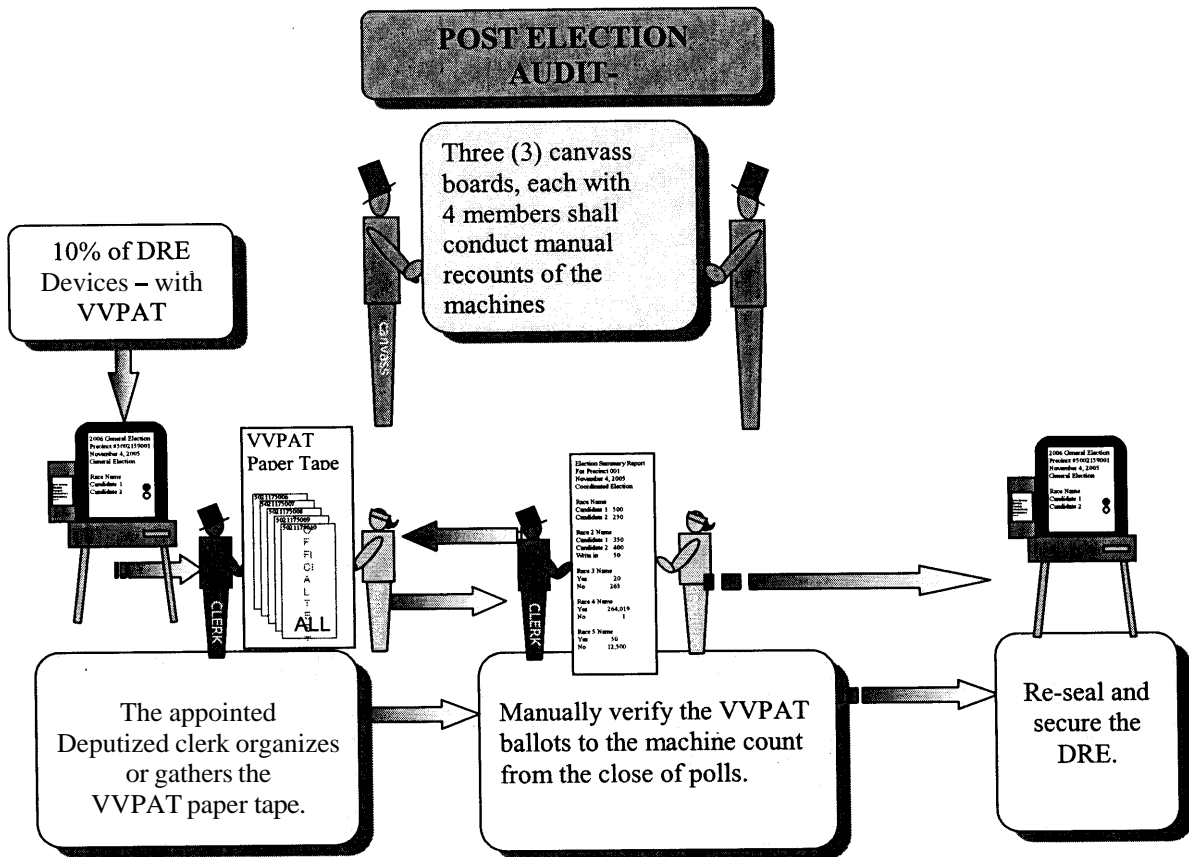
- The estimated resources required to achieve this level of counting is as follows:
  - a. Twelve extra help workers divided into three, 4-person boards as required by law, will be assigned the task to manually recount ballots on 16 DREs.
  - b. Each DRE utilizes a VVPAT (Voter Verified Paper Audit Trail) Printer, thus each printed vote record will be counted manually and the total will be compared against the electronic summary results from the voting unit and tabulation system. The effort in staff time is described below:

Estimated ballots per machine	Estimated minutes to count each ballot	Total minutes to recount ballots on one machine	Total minutes to recount ballots on 16 machines	Total number of hours	Total number of 4-person boards	Total number of additional staff hours
50	2	100	1,600	26.6	3	106

Extra help staff members are paid approximately \$13.50 per hour, plus benefits. In addition, a supervisor must oversee the manual recount. Therefore, the additional task of recounting ballots on 10 percent of the DREs would cost the County approximately \$1,800 and take at least one additional day to complete the task. Should the number of votes cast on the machines be greater than 50, the cost and amount of time it will take will increase. Likewise, should the number of votes cast be less than 50, the cost and time requirement will decrease.

- The County Clerk will report back to the Board of Supervisors 30 days following the certification of the votes cast after the first election in which DREs are used to cast and count votes on the actual cost and time it takes to conduct the 10 percent manual recount. At that time the County Clerk will provide a recommendation for the Board's consideration regarding future manual recounts.

Below is a description of the process that will be deployed for the audit of the DREs with the VVPAT



## Appendix A

## State of Connecticut

Marisa Morello  
 HAVA Project Manager  
 Secretary of the State's Office  
 State of Connecticut  
 (860) 509-6267

Connecticut currently votes on a lever system; along with Optical Scan machines (approved for use in CT since 2001). The lever system has been decertified for 2006. A Request for Proposal (RFP) has been issued for purchase of one electronic voting machine for each of the state's 769 polling places, as required by HAVA. Connecticut is currently in the process of reviewing the RFP responses. Their intention is to take each of the qualifying machines on the road during the week of November 14, 2005 to each Congressional district so that the general public and local election officials can try each machine.

Per the legislation below, Connecticut will give the option for the number of DREs to be audited to the district registrars. The current estimate is approximately 10% to 20% of all DREs will be manually counted. The registrars have communicated that they will have a very difficult time achieving this manual count within the 28 days.

**PA 05-235—sHB 6669**

*Government Administration and Elections Committee*

*Appropriations Committee*

*Legislative Management Committee*

*Judiciary Committee*

EFFECTIVE DATE: Upon passage, effective on January 1, 2006.

***DRE Audit Procedures***

The act gives registrars an option for the number of DREs they must audit. PA 05-188 requires them to conduct a manual audit, within five days after each election or primary, of at least two randomly selected DREs in each assembly district. This act gives them the option of auditing a number of machines equal to one-half of the voting districts in each municipality if that number is less than two per district.

## Appendix B

## State of Colorado

John Gardner  
 Voting Systems Specialist  
 Colorado Department of State  
 1700 Broadway, Ste 370  
 Denver, CO 80290  
 Office: 303.894.2200 ext. 6318  
 Fax: 303.869.4861

The state of Colorado implemented legislation this past year requiring all electronic voting machines (DRE and Optical Scan) to conduct a mandatory manual recount at the conclusion of each election. Fortunately the legislators allowed for the Secretary of State to promulgate rules on accomplishing this feat.

1. Prior to the election, we require the counties to submit to our office a list of voting equipment being used in the election, plus a sample ballot indicating all of the races in their county. The post-election audit is then initiated by the Secretary of State's office within 24 hours of the close of polls on Election Day. We send each county a report showing which machines, and which races on the ballots counted by that device have been randomly selected for the audit. The amount of the machines is selected as **1% of precinct based voting equipment, 1% of DRE devices used, and at least one Central Count Scanner**. The number of races selected is 2.
2. We only do 1% of voting equipment, except as identified in the case of central count scanners, and then we select at least one scanner.

COLORADO SECRETARY OF STATE ELECTION RULES  
 8 CCR 1505-1

These rules were adopted August 4, 2005 and apply to the conduct of, and preparation for, elections occurring on or after such date.

11.5.4 Post-Election Audit

11.5.4.1 Within twenty-four (24) hours of the close of polls on election night, the Secretary of State shall notify the designated election official which voting devices and which race or races on the ballots have been selected for auditing purposes based on the submitted hardware inventory list referred to in Rule 11.4.2.

11.5.4.2 The selection of equipment will be based on a random selection of **one (1) percent of precinct scanner based voting equipment**, at least one Central Count Scanner/vote center, and **one (1) percent of Direct Record Electronic (DRE) voting devices**.

11.5.4.3 For optical scanners used for any function of counting ballots

except for Central Count/vote center as defined herein, the designated election official shall manually verify all of the ballots that were counted on the randomly selected device(s) with the election summary report that was generated from the device(s) at the close of the polls. The Secretary of State shall randomly select two races to be manually verified.

11.5.4.4 For Optical Scanners used for the purpose of counting ballots in a Central Count/vote center environment as defined herein, the designated election official shall randomly select one (1) percent but not more than one hundred (100) ballots of all the ballots counted on the specific audited device. If the amount of ballots is less than one hundred (100) on the audited device, then all of the ballots will be manually verified. The public counter for that voting device shall be reset to zero, and the ballots shall be recounted on the voting device. A new report will be generated from the electronic count of the ballots and shall be manually verified. The ballots and a copy of the report shall be sealed in a separate container and secured with the remainder of the official election records for the election. The Secretary of State shall randomly select two races to be manually verified.



Dec. 12, 2005

Dear Supervisors,

At your recent meeting with Carl Belloni regarding the county's proposed acquisition of new touch screen voting machines, Supervisor Wankandt suggested that we increase the random audit of electoral machines from 1% to 10% following the next, and future, elections. There seemed to be agreement on this issue, but I'm unclear whether this change was legislated or merely suggested.

If it was the latter, I urge you to fully legislate the "10%" number for the random audit, thus ensuring that we have 10x the chance of finding out if there are any problems with these machines. I'm only one of many in this community that know that electronic voting is being used to run fraudulent elections throughout America - while I trust Ms. Belloni, I also want her to have the necessary tools & budget to ensure that our election machines are honest. Only then, can we trust that our elected leaders are truly our elected leaders.

Thank you,

Theodora Terry

PO Box 8137

Santa Cruz, CA 95061

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## Terry Dorsey

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**From:** Ellen Pirie  
**Sent:** Friday, December 09, 2005 12:54 PM  
**To:** Terry Dorsey  
**Subject:** FW: Sequoia Systems Voting Machines

-----Original Message-----

From: maureen smith [mailto:mmsmith@cruzio.com]  
Sent: Thursday, December 08, 2005 10:51 PM  
To: Tony Campos; Mardi Wormhoudt; Ellen Pirie; Jan Beautz; Mark Stone  
Cc: Michael & Maureen Smith  
Subject: Sequoia Systems Voting Machines

December 8, 2005

Dear Board of Supervisors:

Unfortunately, we will not be able to attend the December 13th Board of Supervisors meeting since we will be out of the area.

**As** you know, we have been very concerned about the electronic voting machine issue, particularly DREs, for nearly three years.

Previously, we expressed our concerns to the Board Of Supervisors when we learned that Santa Cruz County was preparing to enter into contract with Sequoia Systems.

In particular, we hope that the Board will require the suggested 10% random count that both Hawaii and Connecticut have. This will better allow us to identify any possible errors.

We highly recommend that the contract with Sequoia Systems include a provision by which they are required to place their voting machine code in escrow as is done in other states. In case a question arises whether or not there is inappropriate or faulty code, it can be checked by an independent source. Currently, because of proprietary ownership laws this **is** not possible automatically.

We believe it is absolutely necessary that after the vendor trains the Santa Cruz County Elections staff, that the vendor has absolutely no control over any part of an election, and that the County has full control.

Finally, we are in support of appropriate recommendations which best guarantee that voting secrecy and accuracy are maintained, and Voting Machine error - intentional or accidental - is detected and acted upon appropriately.

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Sincerely,

Michael J. and Margaret M. Smith  
**564** Santa Marguarita Drive  
Aptos, CA 95003