California Secretary of State
Proposed Regulatory Action: Risk Limiting Audits
Proposed Regulation Text

California Code of Regulations
Title 2. Administration
Division 7. Secretary of State
Chapter 2. Risk Limiting Audits

20110. General Provisions

(a) The purpose of this chapter is to establish guidelines and procedures for an elections official
to conduct a risk-limiting audit in accordance with the requirements of Division 15, Chapter 4,
Article 5.5 of the California Elections Code.

(b) Pursuant to Elections Code section 15367(a)(1), commencing with the statewide primary
election held on March 3, 2020, the elections official conducting an election may conduct a risk-
limiting audit in place of the one percent manually tally required by Elections Code section
15360 during the official canvass of any election.

(c) If an elections official decides to conduct a risk-limiting audit in place of the one percent
manually tally required by Elections Code section 15360 during the official canvass of any
election, the elections official shall, no later than one day after the completion of the semifinal
official canvass pursuant to Elections Code section 15150:

(1) notify the Secretary of State; and

(2) provide the Secretary of State with a list of all contests in its jurisdiction included in that
election.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.
Reference: Sections 15150, 15360 and 15367, Elections Code.

20111. Definitions

As used in this Chapter, the following terms have the following meanings:

(a) “Ballot” shall have the meaning set forth in Elections Code section 15366(a).

(b) “Ballot-level comparison audit” shall have the meaning set forth in Elections Code section
15366(b).

(c) “Ballot manifest” means a detailed description of how the ballots are stored and organized,
listing the unique physical location of each and every ballot cast in the election in such a way
that individual ballots or batches of ballots can be found, retrieved, and examined manually.

(d) “Ballot-polling audit” shall have the meaning set forth in Elections Code section 15366(c).

(e) “Cast vote record” shall have the meaning set forth in Elections Code section 15366(d).
(f) “Cross-jurisdictional contest” shall have the meaning set forth in Elections Code section 15366(e).

(g) “Elections official” shall have the meaning set forth in Elections Code section 320.

(h) “Electoral outcome” shall have the meaning set forth in Elections Code section 15366(f).

(i) “Partial risk-limiting audit” shall have the meaning set forth in Elections Code section 15366(g).

(j) “Risk-limiting audit” or “RLA” shall have the meaning set forth in Elections Code section 15366(h).

(k) “Statewide contest” means any contest that appears on the ballot of every voter throughout the state, including statewide ballot measures and excluding partisan primaries.

(l) “Voting system” shall have the meaning set forth in Elections Code section 362.


20112. Audit Types

An elections official conducting a risk-limiting audit shall use an RLA software tool provided by the Secretary of State to perform one of the following:

(a) A ballot-level comparison audit, with a five percent risk limit.

(b) A ballot polling audit, with a five percent risk limit.

(c) A risk-limiting audit using another method, with a five percent risk limit, as approved by the Secretary of State.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20113. Audit Initiation

(a) If the audit commences after all ballots cast within the jurisdiction have been tabulated, the audit shall be conducted in a single phase as described in section 20121.

(b) If the audit commences before all ballots cast within the jurisdiction have been tabulated, it shall be conducted in two phases as described in section 20122.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20114. Selection of Contests

(a) An elections official shall conduct an RLA or partial RLA on at least three contests. The contests shall include one statewide contest and two contests either partially or fully contained
within the jurisdiction of the county, except for statewide contests, selected at random by the
SOS pursuant to subdivision (c).

(b) If an elections official conducts an RLA or partial RLA on more than three contests, the
elections official may choose any contest, including statewide contests, either partially or fully
within its jurisdiction. These additional contests need not be chosen at random.

(c) The SOS shall randomly select the contests to be audited using the following procedure:

(1) The SOS shall make the selection process open to the public.

(2) The selection of the contests shall take place two days after the completion of the
semifinal official canvass pursuant to Elections Code section 15150.

(3) The SOS shall list all statewide contests in any order and number them in sequential
integers starting with one.

(4) The SOS shall list the contests partially or fully contained within the jurisdiction of each
 county that is conducting an RLA, except for statewide contests, in any order on a separate
list for each county. The SOS shall list these contests in sequential integers starting with one.

(5) The SOS shall select one statewide contest to be used by all counties. The SOS shall
select the contests partially or fully contained in each county, excluding statewide contests,
separately for each county.

(6) The SOS shall roll fair, translucent, differently colored ten-sided dice with faces
numbered zero through nine to select the contests. As many 10-sided dice as there are digits
in the number of such contests shall be rolled to make each selection. If there are 10 or fewer
contests, one die shall be rolled to select each contest for audit. If there are more than 10
contests but not more than 100 contests, two dice shall be rolled to select each contest. If
there are more than 100 but not more than 1,000 contests, three dice shall be rolled to select
each contest. Rolls of the dice shall be considered to be digits in a random number. Before
the rolls commence, each die shall be assigned a place value; for instance, if there are more
than 10 contests but not more than 100 contests, two dice could be used, a red die to
represent the ones place and a blue die to represent the tens place. If the dice land showing
three on the red die and four on the blue die, the result is the number 43. Add one to the
number represented by the dice. In this example, the result is 44. If that result is not greater
than the total number of contests from which the selection is to be made, include the contest
with that number in the audit. If the result is greater than the total number of such contests,
roll the die or dice again. Repeat until the requisite number of contests has been selected.

(d) If there is no statewide contest in an election, the SOS shall select all three contests from that
election at random as described in subdivision (c).

(e) If an election is held with three or fewer contests, including statewide contests, all contests in
that election shall be selected for the RLA.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.
Reference: Section 15150, Elections Code.
20115. Audit Board Selection

(a) The elections official shall appoint an audit board(s) to perform the duties specified in section 20123 that meets the following criteria:

(1) Audit boards shall consist of no fewer than three members, one of whom shall serve as an observer of the audit.

(2) Audit board members may be comprised of election office full-time or temporary staff, volunteers or a combination of staff and volunteers.

(3) Prior to conducting the audit, all members of an audit board shall sign a declaration of intent to faithfully discharge audit board duties. The declaration shall be in substantially the following form:

State of California  
County of ____________________ ss.

I do hereby solemnly declare that I will support the Constitution of the United States and the Constitution of the State of California, and that I will to the best of my ability, faithfully discharge the duties of an audit board member for the election held on ______, 20__.  

Signed in the presence of the elections official listed below on _____, 20__.  

_______ (Printed Name) _______  ______ (Signature) ______

_______ (Printed Name) _______  ______ (Signature) ______

Elections official name  Elections official signature

(4) No fewer than two members of the audit board will be in possession of ballots at any time, including during the ballot retrieval process.

(b) If the elections official appoints multiple audit boards, only one audit board shall evaluate each ballot.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20116. Public Education on Risk-Limiting Audits

(a) Prior to conducting an RLA, an elections official shall release information to the public through readily available communication channels including, but not limited to, its website, social media posts, email lists, press releases, and/or notices at its office. This information shall include descriptions of how the process will be conducted, the difference between 1% manual tally and an RLA, and the methods for ensuring ballot security. The elections official shall also
provide information regarding the process for selection of their audit boards and procedures used to ascertain voter intent manually.

(b) The Secretary of State shall make the same materials described in (a) above available on its website.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20117. Ballot Manifest and Ballot Handling

(a) Any elections official conducting an RLA shall maintain an accurate ballot manifest, created independent of the voting system. The ballot manifest shall uniquely identify for each tabulated ballot the storage container in which the ballot is stored after tabulation.

(b) The format for the ballot manifest shall be in the format required by the RLA software tool in the California Post-Election Risk-Limiting Audit Ballot Manifest Format document dated October 15, 2019, which the Secretary of State shall post on its website.

(c) If the audit commences after all valid ballots have been tabulated, the elections official shall create only one ballot manifest.

(d) If the audit commences before all valid ballots have been tabulated, the elections official shall create two ballot manifests, one before each phase of the audit: an initial ballot manifest that includes all ballots that have been tabulated before the first phase of the audit starts, followed by the final ballot manifest including all tabulated ballots.

(e) The content of the initial ballot manifest shall not be changed in the final manifest; accordingly, no ballots shall be added to the containers included in the initial manifest. Instead, the tabulated ballots that are not included in the initial ballot manifest shall be stored in new containers, and the final ballot manifest shall include all the rows in the initial ballot manifest plus a row for each new container.

Example: 1,000,000 ballots were cast in the county, of which 900,000 had been tabulated when the elections official decided to start the first phase of a two-phase audit. The initial ballot manifest includes those 900,000 ballots. Ultimately, 97,000 of the remaining 100,000 ballots are determined to be valid. These ballots are tabulated and are stored in new containers. The final ballot manifest consists of the initial ballot manifest plus additional rows that describe the new containers in which these 97,000 ballots are stored, for a total count of 997,000 ballots in the ballot manifest for the second audit phase.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20118. Chain of Custody

(a) The elections official shall maintain and document uninterrupted chain of custody for each ballot and each ballot storage container. Chain of custody logs should, at a minimum, include an identifying number of each ballot storage container and the number of a tamper-evident seal
affixed to each ballot storage container. Chain of custody logs shall be available for public inspection after the canvass is complete.

(b) The elections official shall secure and maintain in sealed ballot containers all tabulated ballots.

(c) The elections official shall establish written procedures to ensure the security, confidentiality, and integrity of any ballots, cast vote records, or any other data collected, stored, or otherwise used pursuant to this section. These procedures shall be published on its website at least five days in advance of the audit.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20119. Data Publication Prior to Audit

(a) When the elections official submits data to the RLA software tool before an audit phase begins they shall also publish the same data on their website before continuing with the audit. The elections official shall also publish any changes made to such data.

(b) Subject to Elections Code section 2194(a), cast vote record data shall not be posted to the elections official’s website, but shall be made available to the public at the location where the audit is being conducted.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.
Reference: Section 2194, Elections Code.

20120. Random Seed

A random seed is a number consisting of at least 20 digits that is used to generate a random number sequence to select ballots for audit.

(a) The random seed shall be generated in order by sequential rolls of one or more fair 10-sided dice.

(b) The random seed shall be generated in a public meeting as follows:

   (1) The elections official shall give at least five days public notice of this public meeting.

   (2) The elections official shall randomly select members of the public who attend the meeting to take turns rolling a die, and designate one or more staff members to take turns rolling a die.

   (3) In the event that no members of the public attend the meeting, the elections official can designate someone or themselves to roll the die.

(c) After the random seed is generated, the elections official shall provide the random seed to the public through one or more readily available communication channels including, but not limited to, its website, social media posts, email lists, press releases, and/or notices at its office.
(d) The random seed shall be entered into the RLA software tool as provided in sections 20121(d) and 20122(e).

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20121. Audit Procedures for Single-Phase Audit

(a) The elections official conducting an RLA after all ballots cast within the jurisdiction have been tabulated and reported shall enter the following information into the RLA software tool:

(1) the ballot manifest for all ballots;

(2) the results for all ballots tabulated; and

(3) if a ballot-level comparison audit is being conducted, the cast vote records for all ballots tabulated.

(b) If the RLA software tool identifies any inconsistencies in the information entered under subdivision (a), the elections official shall resolve the inconsistencies before the audit proceeds.

(c) After the data have been submitted under subdivisions (a) and (b), the elections official shall generate a random seed pursuant to section 20120.

(d) The elections official shall enter the random seed into the RLA software tool. The RLA software tool will generate a list of particular ballots or batches of ballots from the ballot manifest to inspect manually.

(e) The elections official may at any point decide to conduct a full manual tally of any contest(s) whose outcomes have not yet been confirmed by the RLA. In the event that the elections official conducts a full manual tally, the RLA of that contest shall be suspended. Such a manual tally shall follow the procedure specified in Elections Code section 15290.


20122. Audit Procedures for Two-Phase Audit

(a) An elections official conducting a two phase audit under subdivision (d) of section 20117 shall do so in accordance with this section.

(b) In the first phase of the audit, the elections official shall enter the following information into the RLA software tool:

(1) the initial ballot manifest for all ballots tabulated as described in subdivision (d) of section 20117;

(2) the results for all ballots tabulated that are included in the initial ballot manifest;

(3) if a ballot-level comparison audit is being conducted, the cast vote records for all ballots tabulated that are included in the initial ballot manifest; and
(4) the maximum number of ballots to be tabulated.

(c) If the RLA software tool identifies any inconsistencies in the information entered under subdivision (b), the elections official shall resolve the inconsistencies before the audit proceeds.

(d) After the data have been submitted under subdivisions (b) and (c), the elections official shall generate the first random seed pursuant to section 20120.

(e) The elections official shall enter the first random seed into the RLA software tool. The RLA software tool will specify which particular ballots from the ballot manifest to examine manually.

(f) In the second phase of the audit, the elections official shall enter the following information into the RLA software tool:

1. the final ballot manifest for all ballots tabulated as described in subdivision (d) of section 20117;
2. the results for all ballots tabulated that are included in the final ballot manifest; and
3. if a ballot-level comparison audit is being conducted, the cast vote records for all ballots tabulated that are included in the final ballot manifest.

(g) If the RLA software tool identifies any inconsistencies in the information entered under subdivision (f), the elections official shall resolve the inconsistencies before the audit proceeds.

(h) After the data have been submitted under subdivisions (f) and (g), the elections official shall generate the second random seed pursuant to section 20120.

(i) The elections official shall enter the second random seed into the RLA software tool. The RLA software tool will identify whether the audit can stop or require further auditing. If further auditing is required, the RLA software tool will specify which particular ballots from the final ballot manifest to examine manually.

(j) The elections official may at any point decide to conduct a full manual tally of any contest(s) whose outcomes have not yet been confirmed by the RLA. In the event that the elections official conducts a full manual tally, the RLA of that contest shall be suspended. Such a manual tally shall follow the procedure specified in Elections Code section 15290.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.
Reference: Section 15290, Elections Code.

20123. Ballot Retrieval and Manual Examination

(a) The audit board shall locate and retrieve, or observe the location of and retrieval by elections official or election staff of, each randomly selected ballot from the appropriate storage container. The audit board shall verify that the seals on the appropriate storage containers are those recorded on the applicable chain of custody log.

(b) The audit board shall examine each randomly selected ballot. If the selected ballot was duplicated prior to tabulation, the audit board shall retrieve the original ballot and report how the original (rather than the duplicate) was marked.
(c) The audit board shall interpret voter markings on ballots selected for audit in accordance with Elections Code section 15154. If the audit board members cannot unanimously agree on the voter’s intent, they shall indicate their disagreement in the final report in section 20125. They shall then notify the elections official of the disagreement, who shall arbitrate the issue. The elections official may either:

(1) Instruct the audit board members to replace the ballot with another ballot, selected at random, that contains the same contests as the previously selected ballot; or

(2) Make a final determination of the voter markings and instruct the audit board to submit the voter markings or choices in all audited contests to the RLA software tool.

(d) The audit board shall record the voters’ choices in every contest on every ballot card selected for audit, including contests not subject to an RLA or partial RLA. Those choices shall be entered into the RLA tool.

(e) The audit shall continue until the risk limit is met for every contest selected for audit under section 20114. If the RLA software tool specifies that additional ballots need to be examined, the elections official shall retrieve them as described in (a).

(f) If the elections official chooses to perform a full manual tally of one or more contests, the audits of those contests will be deemed to have met the risk limit and the results of the full manual tally shall be the official results for those contest(s).

(g) If there is any contest in the jurisdiction not contained on any of the ballots selected for the audit, the elections official shall select one or more precincts at random from precincts that contain the contest and manually tabulate the votes in that contest in those precincts, pursuant to Elections Code section 15360. The manual tabulation shall apply only to the contests not previously included in RLA.

(h) The RLA shall be completed no later than the business day before the canvass deadline.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.
Reference: Sections 15154, 15360 Elections Code.

20124. Public Observation and Verification of Audit

(a) An elections official conducting an RLA shall ensure that the audit process is observable and verifiable to the public. The elections official shall:

(1) Provide at least five days public notice prior to the first phase of the RLA. This notice shall include the time and place of the random seed generation described in section 20120 and the date the ballots will be retrieved and manually examined.

(2) Describe in writing the process of manually examining ballots and the selection of the ballots to be used in the audit.

(3) Provide observers with an oral and/or written explanation of the RLA process, a written code of conduct for observation, and any documentation they will need for informed and effective observation.
(A) The code of conduct for observation will explain the rights and responsibilities of observers.

(B) Such documentation shall include but not be limited to any data the audit relies upon, including the ballot manifest and the cast vote records for ballot-level comparison audits.

(4) Disclose the methods used to select samples and to calculate the risk.

(5) Provide the public the opportunity to observe ballots being retrieved during the audit.

(6) Provide the public the opportunity to observe the voters’ marks on every audited ballot during the audit.

(b) Observers can ask questions of the audit board, as long as they do not interfere with the conduct of the audit procedures.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20125. Certification of Contest Results and Reporting of Audit Results
(a) The elections official conducting an RLA shall report the results of the audit in the certification of the official canvass of the vote. The report shall contain the following:

(1) The type of RLA conducted (e.g. ballot comparison or ballot polling);

(2) The date and time the RLA commenced and finished, and the number of rounds of sampling;

(3) A list of contests audited, with final reported results for those contests and the final measured risk for each contest;

(4) A link to the website where the ballot manifest can be found;

(5) The random seed(s) the elections official generated for use with the RLA software tool, and when and how the random seed(s) was generated;

(6) The number of ballots examined for each contest under audit, noting whether a full manual tally was conducted. If the audit was conducted in stages or continued beyond the first sample, a description of how the sample was drawn and the number of ballots selected at each stage.

(7) Notes regarding any ballots for which the audit board could not determine the voter’s intent, as described in subdivision (c) of section 20123;

(8) A link to the website where the list of the particular ballots examined can be found;

(9) For ballot-level comparison audits:

   (A) The number and type of discrepancies; and

   (B) A link to the website where the cast vote record file only for the ballots examined in the audit can be found;

(10) The person-hours required to prepare for the audit, and number of people involved;
(11) The person-hours required to conduct the audit, and number of people involved;
(12) The number of members of the public who observed the audit;
(13) Notes on anything unusual or problematic, or that would be useful to improve the process, or that might be of value to the Secretary of State or other elections officials; and
(14) An attestation from the elections official that the RLA was conducted in accordance with these regulations.

(b) The certification of the official canvass of the vote shall be conducted in accordance with Division 10, Part 2, Chapter 2, and Article 4 of the California Elections Code.

(c) The Secretary of State shall publish any report under this section received from an elections official on its website no later than five days after the date it publishes the certification of the official canvass of the vote. This subdivision shall not prohibit the elections official from publishing the same report on its website.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.

20126. Redaction of Personally Identifiable Voter Choices

No later than the third business day following the expiration of the deadline to request a recount under California Elections Code sections 15620 or 15621, or the completion of any recount, whichever is later, an elections official who conducted an RLA shall review its cast vote records file that was published and redact from the public record, but not its own files, the voter choices corresponding to any ballot susceptible to being personally identified with an individual voter.

Note: Authority cited: Section 12172.5 Government Code; Section 15367, Elections Code.
Reference: Sections 15620, 15621 Elections Code.