

What do local election officials need to carry out a Risk Limiting Audit?



**Kammi Foote, Inyo County
Clerk/Recorder & Registrar of voters**

Inyo County, California

- **10,227** square miles
- **10,000** Registered Voters
- **Ninth** largest county in the Nation
- **Mt. Whitney** - highest point in the Continental US
- **Bad Water**- lowest point in Northern America
- **Five** Native American Reservations
- **Two** full-time equivalent election staffing positions



Inyo County's RLA

- April 10, 2018 Special Parcel Tax Election
- Single question contest “Yes” and “No”
- All mailed ballot election
- 10 voting precincts
- 2/3 threshold to pass

Getting Organized

- Logs, logs, logs
- Storage containers and labels
- Rubber bands
- Sticky notes
- Dice

Ballot Manifest

84:101-1, 95:101-2, 24:101-3, 6:101-4, 1:102-1, 71:102-2, 24:102-3, 6:103-1, 62:103-2, 13:103-3, 5:103-4, 1:104-1, 112:104-2, 30:104-3, 5:104-4, 3:105-1, 70:105-2, 12:105-3, 5:105-4, 2:106-1, 54:106-2, 18:106-3, 2:107-1, 111:107-2, 17:107-3, 8:108-1, 58:108-2, 5:108-3, 1:109-1, 89:109-2, 19:109-3, 10:109-4, 1:110-1, 29:110-2, 6:110-3

The Seed

1989860534

10% risk limit

Dr. Philip Stark developed the tool to create the computation:

<https://www.stat.berkeley.edu/~stark/Vote/auditTools.htm>

The math behind the sample size calculation can be viewed online

<https://github.com/pbstark/S157F17/blob/master/audit.ipynb>.

Random Selection

- 1, 47, 101-1, 47
- 2, 65, 101-1, 65
- 3, 65, 101-1, 65
- 4, 70, 101-1, 70
- 5, 73, 101-1, 73
- 6, 80, 101-1, 80
- 7, 85, 101-1, 85

Cast Vote Record

Batch		Ballot		Precinct
3	4	3-1-4	Mail Precinct	110MB
3	5	3-1-5	Mail Precinct	110MB
3	6	3-1-6	Mail Precinct	110MB
3	7	3-1-7	Mail Precinct	110MB
3	8	3-1-8	Mail Precinct	110MB
3	9	3-1-9	Mail Precinct	110MB

Conclusion

- Technology is your friend
- If Inyo County can do this, any county can!
- Cost effective
- You are not alone

Contact

Kammi Foote

Inyo County Registrar of Voters

kfoote@inyocounty.us

760-878-0224