CARRYING THE TORCH: THE SOCIETAL IMPACT OF STATE GEOLOGIST JAMES E. SLOSSON

J. David Rogers

and

Robert A. Larson

for

Symposium #5 A Tribute to Dr. James E. Slosson
2007 Annual Meeting
Association of Environmental and Engineering Geologists
Los Angeles, California
September 27, 2007

- James E. Slosson was born in Van Nuys on April 12, 1923, where his father and mother owned a small ranch. He grew up riding horse, and continued the balance of his life.
- At the age of 10 he became aware of geology by his cousin Eugene Reed, former State Geologist of Nebraska, and Chairman of the geology department at the University of Nebraska.

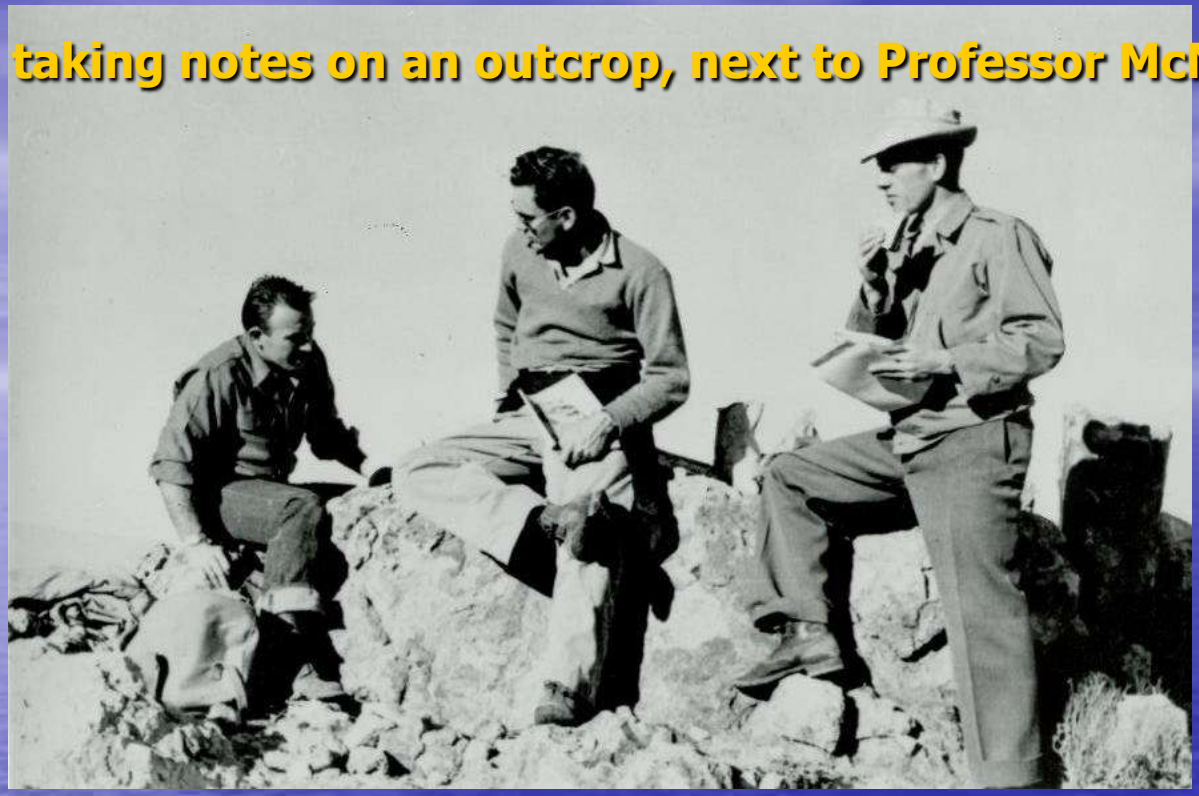
- He was a standout runner at Van Nuys High School. This shows him winning the all-city 880 yard relay at the Los Angeles Coliseum in 1941.
- He also witnessed the devastating effects of the March 1938 floods along the Los Angeles River.



- He graduated from high school 6 months before the attack on Pearl Harbor.
- He received a track scholarship to USC in the fall of 1941 and decided to major in petroleum engineering. He dropped out of college in 1943 and joined the Army.
- These views show him at home with his mother and father, when he was a corporal.

- During the war Jim's older brother Jack received an officer's commission as a bombardier on B-24 bombers. Jim dropped out of USC in 1943 and enlisted in the Army, and by 1945 had received his commission as an infantry officer; assigned to physical education training because his officer application had listed "P.E." (for petroleum engineering) as his major field of study!

Jim (left) taking notes on an outcrop, next to Professor McNaughton



- After the war Jim re-enrolled at USC, with support from the GI Bill. He changed his major to geology after taking a course from Professor Duncan McNaughton.
- A Canadian by birth, McNaughton had won the gold medal in the high jump at the 1932 Olympics in Los Angeles. Afterwards, he accepted an athletic scholarship to USC, where he earned BS and Ph.D degrees in geology and joined the faculty. As a member of the USC track team, Jim formed an instant bond with McNaughton.

- During his summers at SC he worked for the USGS and state Department of Water Resources. This shows Jim (left front) on a geology field trip in the Mojave Desert with his mentor, Prof. Duncan McNaughton, in 1947.

- In 1947 Jim married Nancy Samuel and "slowed down a bit." Nancy worked to help support them while he completed his studies. They were blessed with two children in the early 1950s, Bonnie and Thom.

RUNS TODAY — Jim Slosson, S.C. quarter-miler, will compete in his specialty this afternoon at Occidental when Trojans and Tigers mix in annual track meet.

- **Jim tried to resurrected his running career when he returned to USC after the war, as shown at left. After switching major to geology he received his AB degree in 1949, followed by an MS in 1950.**

- Shortly after receiving his master's from USC in 1950, he accepted a teaching position at Los Angeles Valley College, where he chaired their Earth Science Department until 1965.
- During this period he also worked part time for Gulf Oil, which figured prominently in his Ph.D. dissertation at USC on the Repetto Basin, which he completed in 1958.
- Like Ronald Reagan, he loved riding his horses in the hills, shown here on his favorite mount, dingbat.

4-A Van Nuys. California NEWS Thursday, May 28, 1953

California State Track Crown to Valley; Anderson, Leach, Lafferty Take Firsts

By TOM REILLY

A four-year-old won the big race at Visalia last Saturday.

The four-year-old was Valley College and the big race was the California State Junior College track and field championships. It marked the first state title for the young Monarchs and put the proper finishing touches to a successful season for Coach Jim Slosson.

The Green and Gold, taking three individual crowns besides the team honors, finished the evening with a total of 55 points, 17 of them coming in the pole vault, while second place Santa Ana accumulated 45. Compton, a perennial powerhouse, took the No. 3 spot with 34 total points; Mt. San Antonio ended in the fourth position, and last year's state champions, Los Angeles City College, tied with East Los Angeles for fifth place.

Clarence Anderson, Joe Leach and Ed Lafferty took individual titles to add greatly to the final Monarch tabulation. Anderson won the 440 finals in 48.8, after setting a new meet record in the preliminaries the night before with a 48.7 finish, which also set a new Valley mark, breaking his own standard of 49.0 set in the Southern Cal finals a week before. Anderson ended the junior college season undefeated in the 440.

Leach reached his peak of the season as he took the state mile crown in 4:27.4 and finished second in the two mile for more valuable Valley points.

Lafferty cleared 13 ft. 3¼ in. to annex the state pole vault championship. He fell short of his own individual mark of 13 ft. 4 in., which is also the VC mark, and failed to set a new state meet record when he missed clearing 13 ft. 8 in. three times.

Bill McCormick finished fifth in the 100 for the Monarchs and turned in a 49.7 440 leg in the mile relay. The Valley relay crew finished third in that event behind Compton and Mt. San Antonio. Anderson ran a 49.2 leg for Slosson's relay team.

Besides Lafferty in the pole vault, Ralph Avalon cleared 13 ft. and tied for second, and Gene Sturdyvin went over 12 ft. 6 in. to tie for fifth.

Bill Taylor finished second in the state 880 for the second year in a row, when Mt. Sac's Dave Casper, who beat him by two yards in the Southern Cal meet, again nosed him out while setting a new state record. Casper, who ran a 1:54.5 at the So. Cal finals, finished in 1:56.3 and Taylor was clocked in 1:56.6. Both men went under the old mark of 1:57.2.

JIM SLOSSON
. . . Guides VC to State Title

Mason Benner, Santa Monica City College's shot put record holder, once again broke the national junior college shot standard of 51 ft. 4¼ in. as he hurled the 16-lb. weight 53 ft. 7⅛ in. Benner also broke his own mark of 53 ft. 6½ in. which he had reached twice this year.

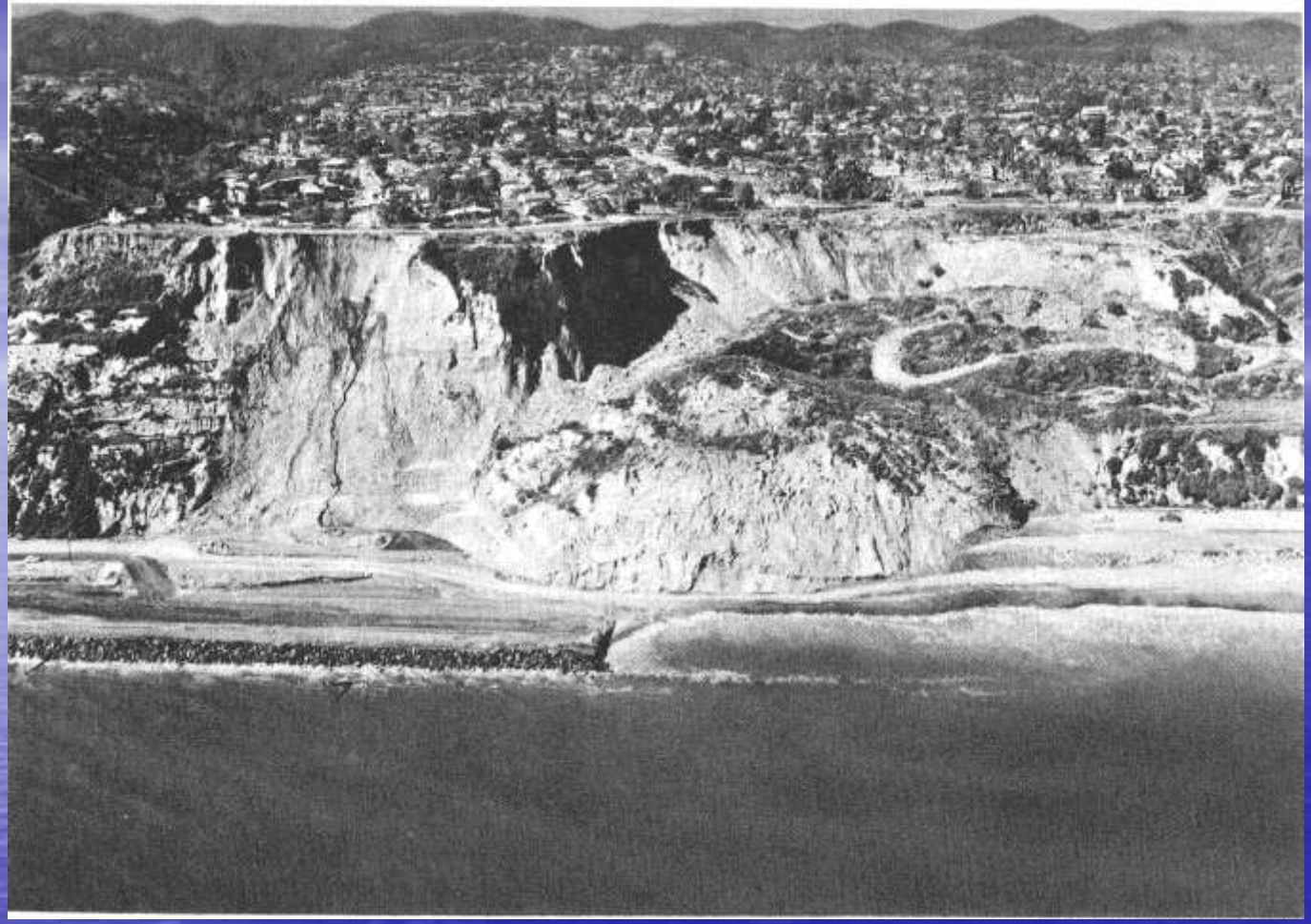
Other new meet marks that went into the books include Compton's mile relay mark of 3:21.7; a new 120 high hurdles mark of 14.9 set by Muir's Clarence James, and a new broad jump standard of 23 ft. 8¾ in. reached by San Mateo's Bud Bortolin.

Times in the 100 and 220 were on the slow side mainly due to a cold 10 m.p.h. wind. The Metropolitan Conference's 220 champion, Al Nunez of Harbor, took the eighth of a mile in 22.2 while a Northern California jayvee spiker, Bob Parish of San Francisco City College, took the 100 in 10.1.

A Born Competitor

- Jim coached track at USC and Valley College throughout the 1950s, until 1962
- This clipping records describes his leading Valley College to the state championship in 1953, a few weeks after his 30th birthday.

- As Los Angeles exploded with growth in the 1950s, high visibility geologic hazards began impacting developed areas, fomenting public outcry and triggering lawsuits.
- This shows the Portuguese Bend Landslide which reactivated in 1956, drawing Los Angeles County into costly litigation.



- The 1958 Via de Las Olas Landslide in Pacific Palisades closed Pacific Coast Highway and drew the City of Los Angeles into costly litigation.
- The City hired a prestigious Manhattan geotechnical firm to make a comprehensive 2-year study, which included mapping slides along 15 miles of coastline

Diversification…

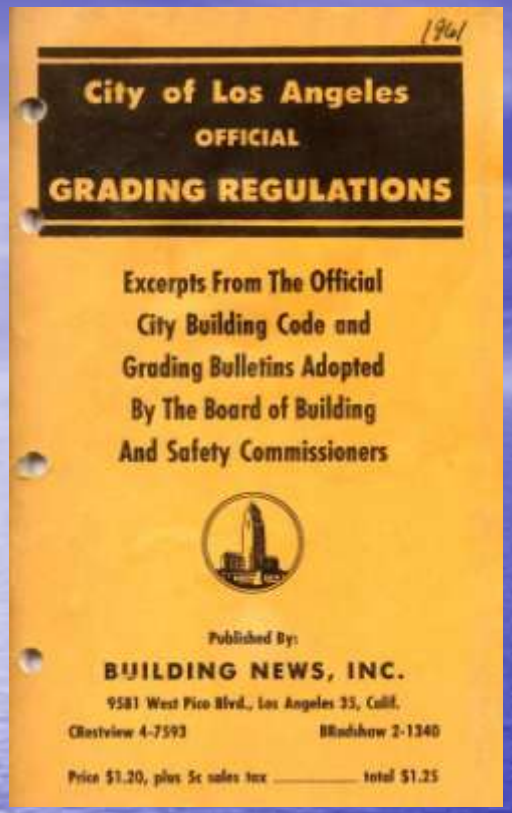
Shifting focus to engineering geology

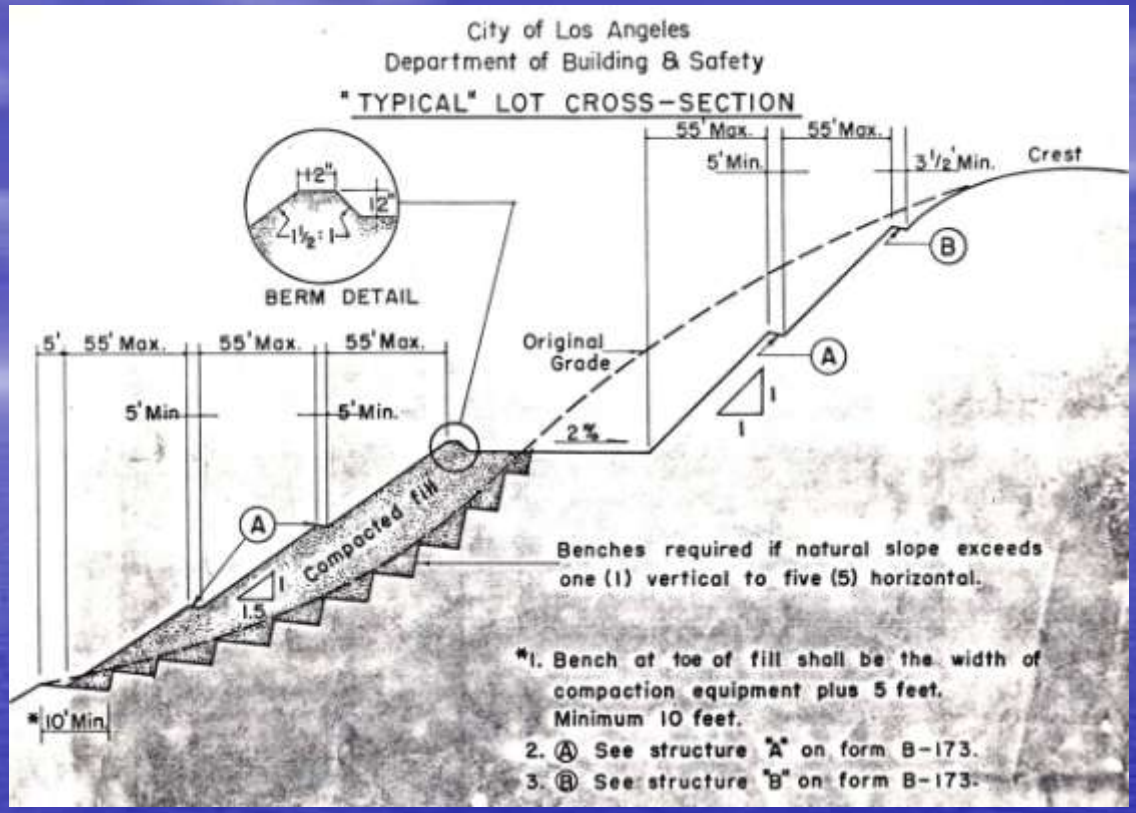
- Shortly after completing his doctorate in 1958, Slosson began a 50 year career in engineering geology, forming James E. Slosson & Associates, and consulting on a expanding array of projects: input for excavation and grading of potentially unstable slopes, seismic risk assessments, landslides, flood and debris flow hazards, and peer review for public agencies.

Rolling Hills Estates- July 1960

- In those days geo disasters were occurring with increasing frequency. This shows a massive slide on Rockbluff Drive in Rolling Hills that began moving in the spring of 1960.

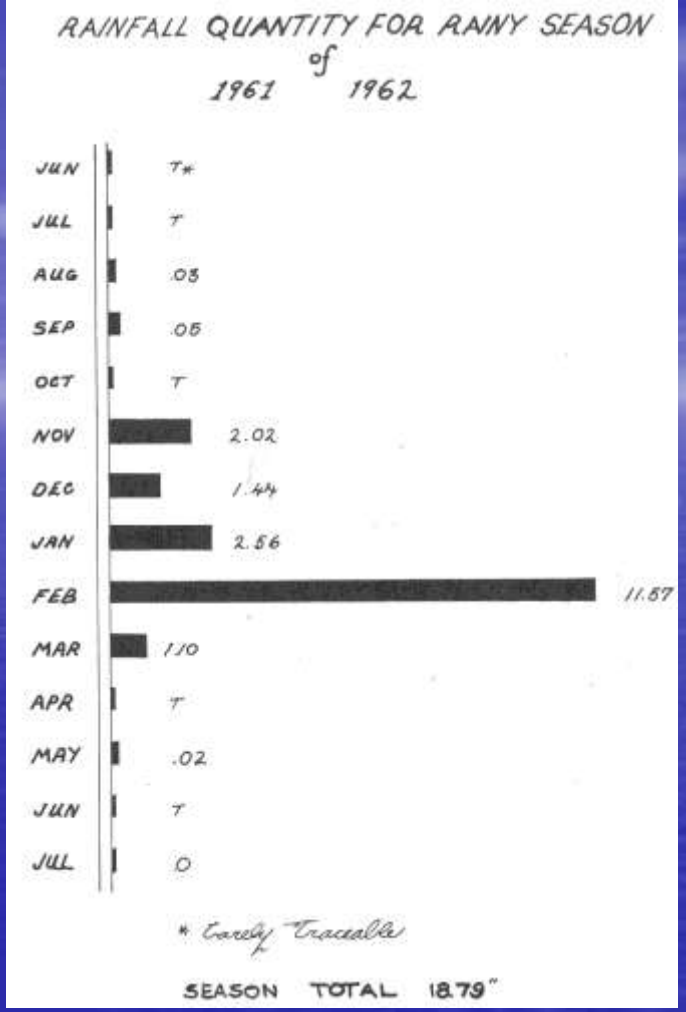
- Between 1946-61 one of every seven homes built in the United States was in the City of Los Angeles, and one in every four in Los Angeles County.
- Jim said they were designed with a “quick, hot and dry” mentality, with little consideration of drainage or geologic setting.



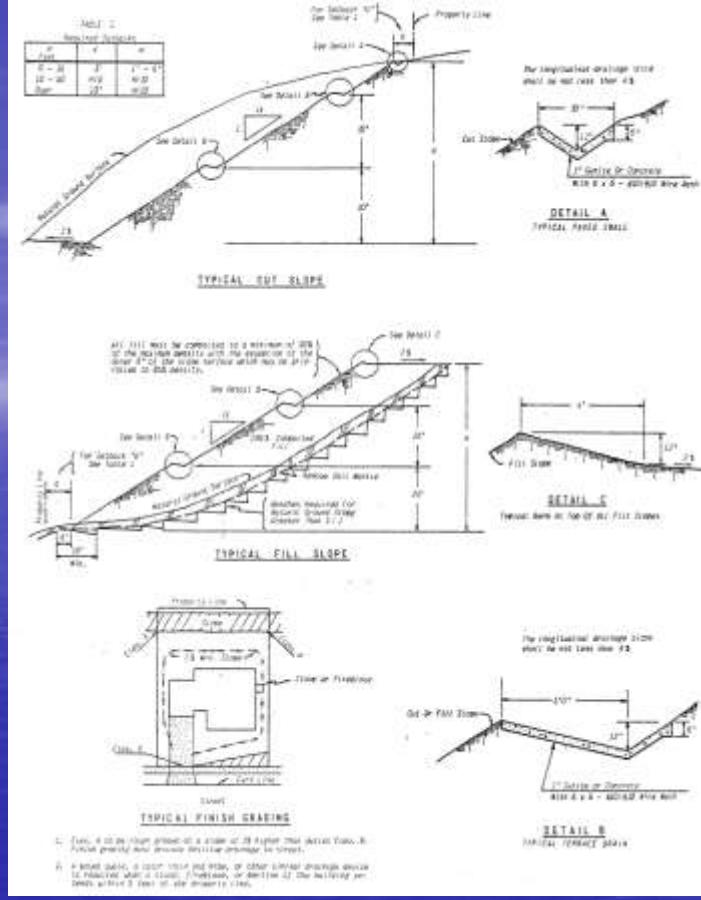


- **Jim's ability to communicate geologic concepts and his zeal to see science and technology applied to development problems naturally attracted reporters.**
- **He soon emerged as one of the principal spokesmen for engineering geology in the Los Angeles area.**
- **In 1961, was asked to sit on the City of Los Angeles Engineering Geologists Qualifications Board and the Hillside Planning Committee of the Department of Building & Safety.**

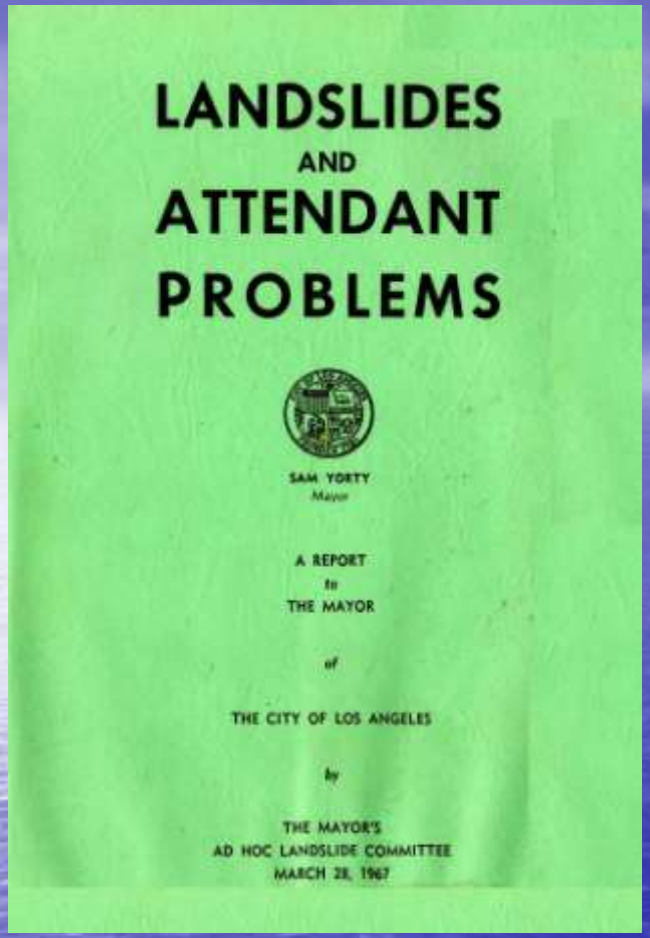

Figure 1-1.



- **In February 1962 Los Angeles was struck by a series of destructive storms, and the stage was set for revising the City's original grading code, which had been the nation's first grading ordinance when adopted in 1952.**



- **It was at this juncture in his life, at age 42, that Jim Slosson began to exert himself in the political arena, when he accepted prominent roles in crafting the post-1962 "modern grading code," and advocating statutory requirements for engineering geologic input in the grading permit process.**



LANDSLIDES AND ATTENDANT PROBLEMS

SAM YORTY
Mayor

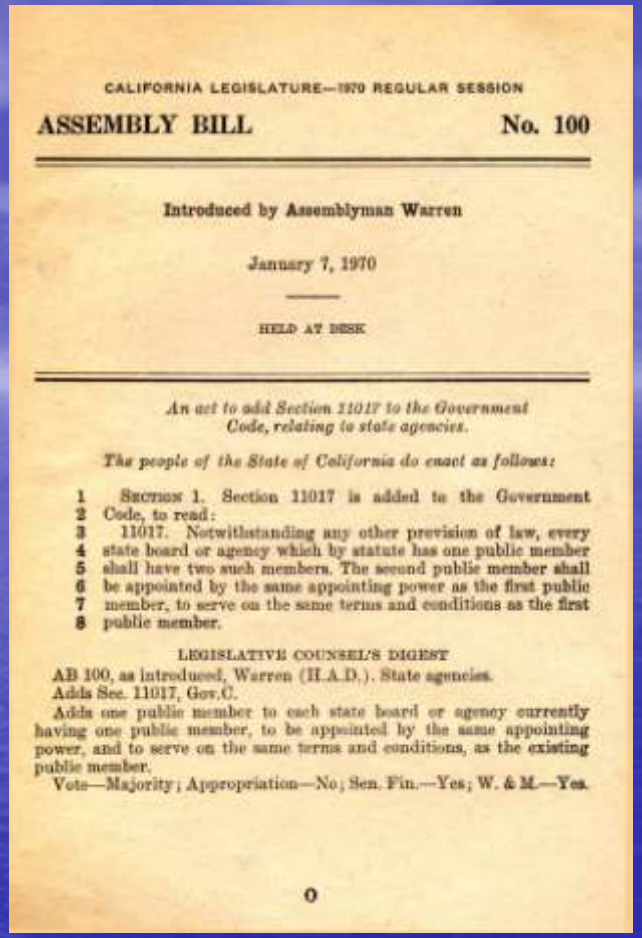
A REPORT
to
THE MAYOR

of

THE CITY OF LOS ANGELES

by

THE MAYOR'S
AD HOC LANDSLIDE COMMITTEE
MARCH 28, 1967



CALIFORNIA LEGISLATURE—1970 REGULAR SESSION

ASSEMBLY BILL **No. 100**

Introduced by Assemblyman Warren

January 7, 1970

HELD AT DESK

An act to add Section 11017 to the Government Code, relating to state agencies.

The people of the State of California do enact as follows:

SECTION 1. Section 11017 is added to the Government Code, to read:

11017. Notwithstanding any other provision of law, every state board or agency which by statute has one public member shall have two such members. The second public member shall be appointed by the same appointing power as the first public member, to serve on the same terms and conditions as the first public member.

LEGISLATIVE COUNSEL'S DIGEST

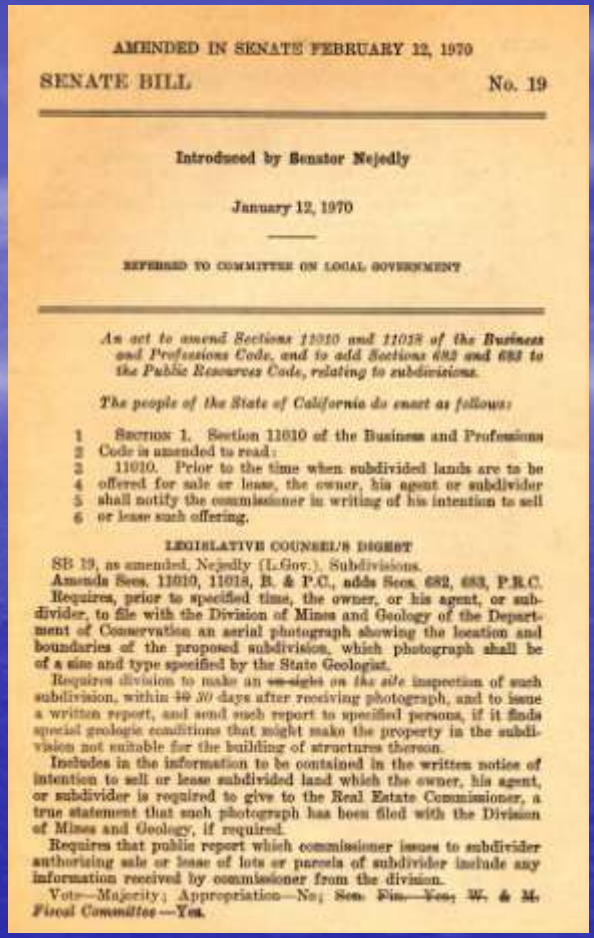
AB 100, as introduced, Warren (H.A.D.). State agencies.

Adds Sec. 11017, Gov.C.

Adds one public member to each state board or agency currently having one public member, to be appointed by the same appointing power, and to serve on the same terms and conditions, as the existing public member.

Vote—Majority; Appropriation—No; Sen. Fin.—Yes; W. & M.—Yes.

o



AMENDED IN SENATE FEBRUARY 12, 1970

SENATE BILL **No. 19**

Introduced by Senator Nejedly

January 12, 1970

REFERRED TO COMMITTEE ON LOCAL GOVERNMENT

An act to amend Sections 11010 and 11018 of the Business and Professions Code, and to add Sections 682 and 683 to the Public Resources Code, relating to subdivisions.

The people of the State of California do enact as follows:

SECTION 1. Section 11010 of the Business and Professions Code is amended to read:

11010. Prior to the time when subdivided lands are to be offered for sale or lease, the owner, his agent or subdivider shall notify the commissioner in writing of his intention to sell or lease such offering.

LEGISLATIVE COUNSEL'S DIGEST

SB 19, as amended, Nejedly (L.Gov.). Subdivisions.

Amends Secs. 11010, 11018, B. & P.C., adds Secs. 682, 683, P.R.C.

Requires, prior to specified time, the owner, or his agent, or subdivider, to file with the Division of Mines and Geology of the Department of Conservation an aerial photograph showing the location and boundaries of the proposed subdivision, which photograph shall be of a size and type specified by the State Geologist.

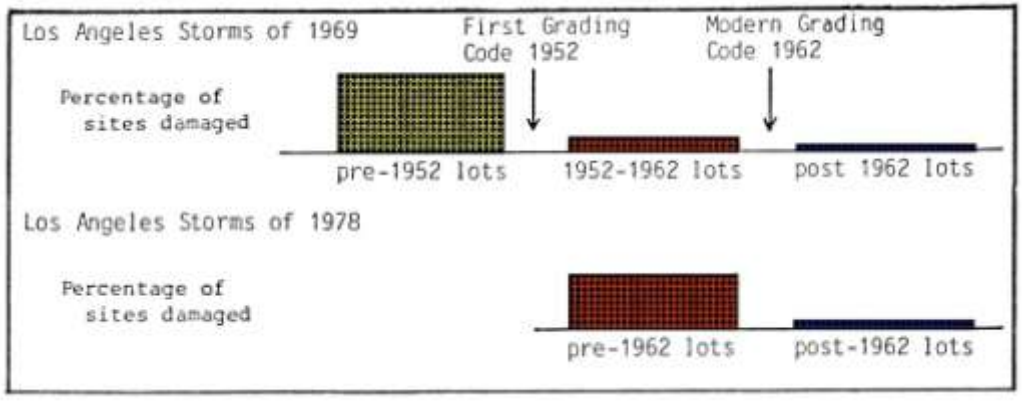
Requires division to make an ~~on-sight~~ *on the site* inspection of such subdivision, within ~~10~~ *30* days after receiving photograph, and to issue a written report, and send such report to specified persons, if it finds special geologic conditions that might make the property in the subdivision not suitable for the building of structures thereon.

Includes in the information to be contained in the written notice of intention to sell or lease subdivided land which the owner, his agent, or subdivider is required to give to the Real Estate Commissioner, a true statement that such photograph has been filed with the Division of Mines and Geology, if required.

Requires that public report which commissioner issues to subdivider authorizing sale or lease of lots or parcels of subdivider include any information received by commissioner from the division.

Vote—Majority; Appropriation—No; ~~Sen. Fin.—Yes; W. & M.~~ *Fiscal Committee*—Yes.

- **These triumphs led to more progress, such as adoption of the grading and excavation appendix of the Uniform Building Code (1964), and professional registration for geologists in California (1969).**



Damage Associated with Destructive Storms of 1969 in Hillside Areas of Los Angeles

	Sites developed prior to 1952	Sites developed 1952-1962	Sites developed 1963-1969
Number of sites constructed	10,000	27,000	11,000
Total damage	$3,300,000	$2,767,000	$184,400
Average damage per site	$300	$100	$17
Percentage of sites damaged	10.4%	1.3%	0.15%

SOURCE: Slosson, 1969

Slope Failures in City of Los Angeles, 1978

	Sites developed prior to 1963	Sites developed after 1963
Number of sites constructed	37,000	30,000
Number of failures	2,790	210
Percentage of sites damaged	7.5%	0.7%

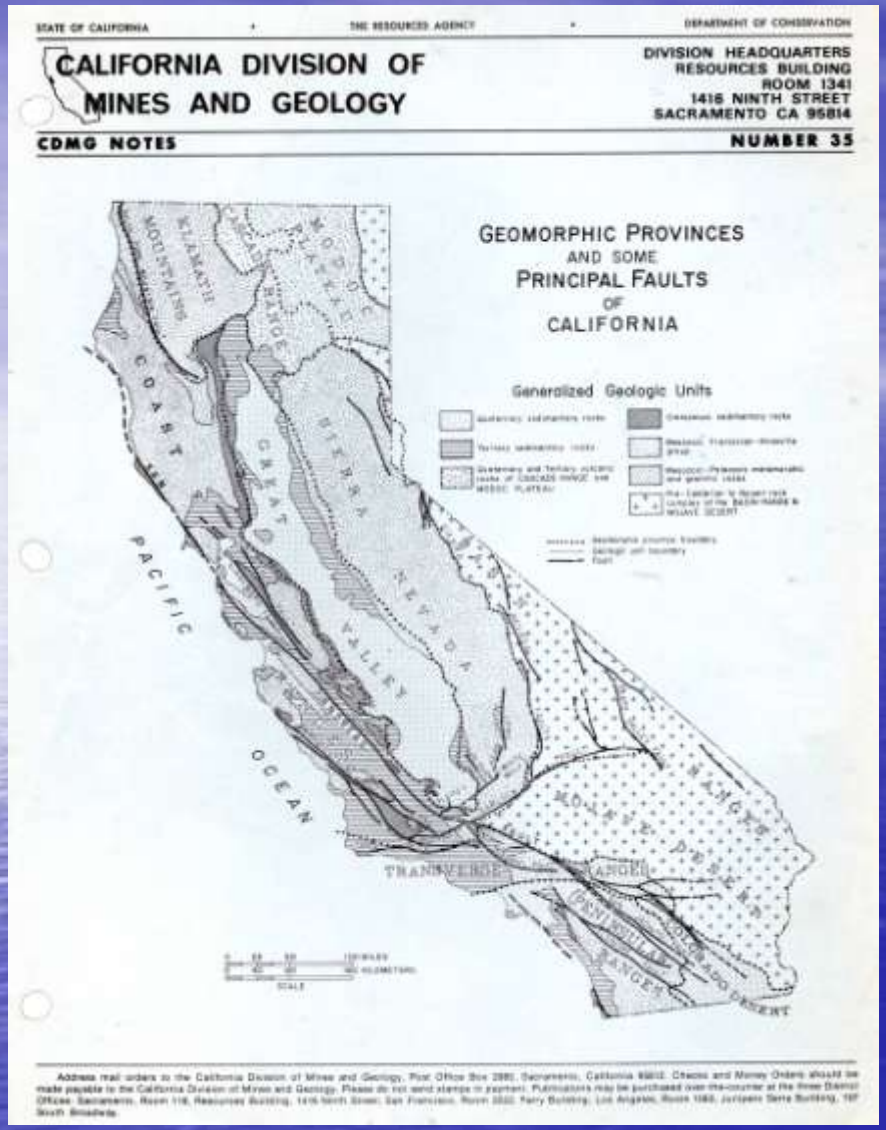
SOURCE: Slosson and Krohn, 1979

- **One of Jim Slosson's greatest achievements was his tabulation comparing the property damage caused by the storms of 1962, 1969, and 1978 with which grading ordinance was in effect when they were permitted.**

Liaison with USC and the Master's program in Engineering Geology

- Jim always maintained strong ties to the USC geology program, especially during the years it was chaired by Dick Stone, shown here.
- Through Jim's influence, in 1972 USC became the first school in California to offer a master's degree in engineering geology.

- On May 1, 1973 Slosson was named Chief Deputy State Geologist by Governor Ronald Reagan, replacing Gordon Oakeshott.
- He was named State Geologist later that same year and served for two years, until mid 1975.



STATE OF CALIFORNIA • THE RESOURCES AGENCY • DEPARTMENT OF CONSERVATION

CALIFORNIA DIVISION OF MINES AND GEOLOGY

DIVISION HEADQUARTERS
RESOURCES BUILDING
ROOM 1341
1416 NINTH STREET
SACRAMENTO CA 95814

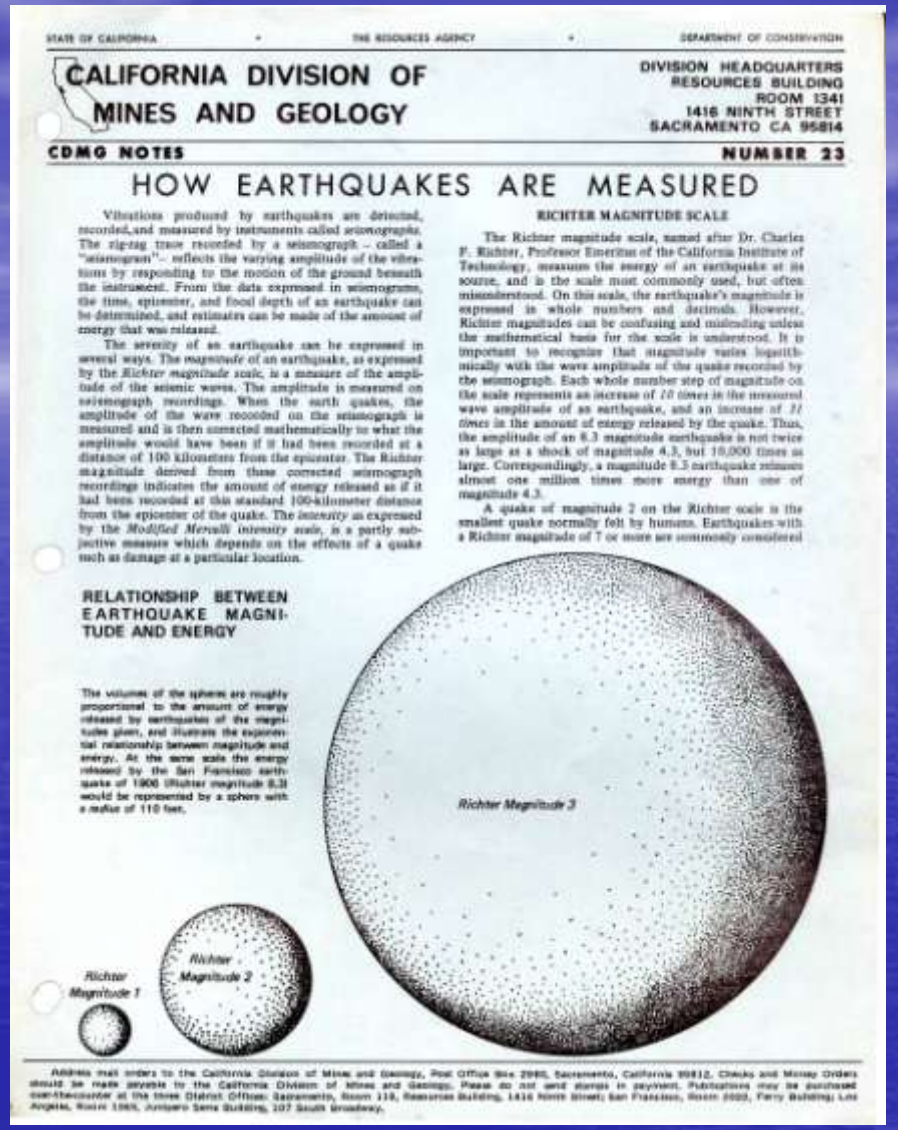
CDMG NOTES NUMBER 35

GEOMORPHIC PROVINCES AND SOME PRINCIPAL FAULTS OF CALIFORNIA

Generalized Geologic Units

PACIFIC OCEAN

Address mail orders to the California Division of Mines and Geology, Post Office Box 2980, Sacramento, California 95812. Checks and Money Orders should be made payable to the California Division of Mines and Geology. Please do not send stamps in payment. Publications may be purchased over-the-counter at the three District Offices: Sacramento, Room 1341, Resources Building, 1416 Ninth Street; San Francisco, Room 3022, Ferry Building; Los Angeles, Room 1065, Junipero Serra Building, 107 South Broadway.



STATE OF CALIFORNIA • THE RESOURCES AGENCY • DEPARTMENT OF CONSERVATION

CALIFORNIA DIVISION OF MINES AND GEOLOGY

DIVISION HEADQUARTERS
RESOURCES BUILDING
ROOM 1341
1416 NINTH STREET
SACRAMENTO CA 95814

CDMG NOTES NUMBER 23

HOW EARTHQUAKES ARE MEASURED

Vibrations produced by earthquakes are detected, recorded, and measured by instruments called seismographs. The zig-zag trace recorded by a seismograph – called a "seismogram" – reflects the varying amplitude of the vibrations by responding to the motion of the ground beneath the instrument. From the data expressed in seismograms, the time, epicenter, and focal depth of an earthquake can be determined, and estimates can be made of the amount of energy that was released.

The severity of an earthquake can be expressed in several ways. The *magnitude* of an earthquake, as expressed by the *Richter magnitude scale*, is a measure of the amplitude of the seismic waves. The amplitude is measured on seismograph recordings. When the earth quakes, the amplitude of the wave recorded on the seismograph is measured and is then corrected mathematically to what the amplitude would have been if it had been recorded at a distance of 100 kilometers from the epicenter. The Richter magnitude derived from these corrected seismograph recordings indicates the amount of energy released as if it had been recorded at this standard 100-kilometer distance from the epicenter of the quake. The *intensity* as expressed by the *Modified Mercalli intensity scale*, is a partly subjective measure which depends on the effects of a quake such as damage at a particular location.

RICHTER MAGNITUDE SCALE

The Richter magnitude scale, named after Dr. Charles F. Richter, Professor Emeritus of the California Institute of Technology, measures the energy of an earthquake at its source, and is the scale most commonly used, but often misunderstood. On this scale, the earthquake's magnitude is expressed in whole numbers and decimals. However, Richter magnitudes can be confusing and misleading unless the mathematical basis for the scale is understood. It is important to recognize that magnitude varies logarithmically with the wave amplitude of the quake recorded by the seismograph. Each whole number step of magnitude on the scale represents an increase of *10 times* in the measured wave amplitude of an earthquake, and an increase of *31 times* in the amount of energy released by the quake. Thus, the amplitude of an 8.3 magnitude earthquake is not twice as large as a shock of magnitude 4.3, but 10,000 times as large. Correspondingly, a magnitude 8.3 earthquake releases almost one million times more energy than one of magnitude 4.3.

A quake of magnitude 2 on the Richter scale is the smallest quake normally felt by humans. Earthquakes with a Richter magnitude of 7 or more are commonly considered

RELATIONSHIP BETWEEN EARTHQUAKE MAGNITUDE AND ENERGY

The volumes of the spheres are roughly proportional to the amount of energy released by earthquakes of the magnitudes given, and illustrate the exponential relationship between magnitude and energy. At the same scale the energy released by the San Francisco earthquake of 1906 (Richter magnitude 8.3) would be represented by a sphere with a radius of 110 feet.

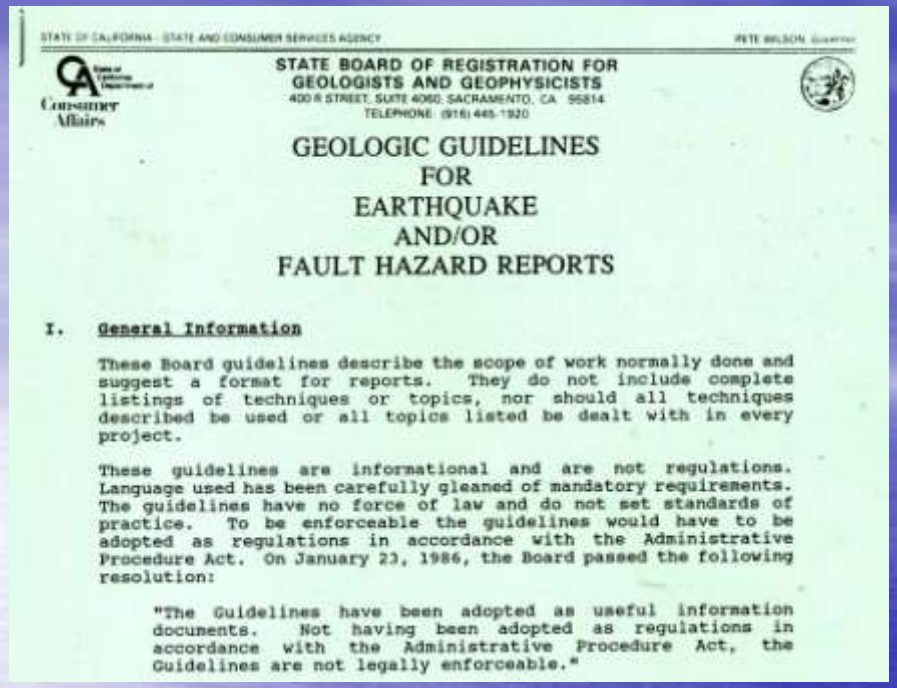
Richter Magnitude 1

Richter Magnitude 2

Richter Magnitude 3

Address mail orders to the California Division of Mines and Geology, Post Office Box 2980, Sacramento, California 95812. Checks and Money Orders should be made payable to the California Division of Mines and Geology. Please do not send stamps in payment. Publications may be purchased over-the-counter at the three District Offices: Sacramento, Room 1341, Resources Building, 1416 Ninth Street; San Francisco, Room 3022, Ferry Building; Los Angeles, Room 1065, Junipero Serra Building, 107 South Broadway.

- **Jim's expertise as a teacher-communicator proved valuable to CDMG, where he was an advocate of these DMG Notes. He spent considerable energy educating decision makers in the capitol and encouraging legislation.**



STATE OF CALIFORNIA - STATE AND CONSUMER SERVICES AGENCY — PETE WILSON, Governor

Consumer Affairs

STATE BOARD OF REGISTRATION FOR GEOLOGISTS AND GEOPHYSICISTS
400 R STREET, SUITE 4060, SACRAMENTO, CA 95814
TELEPHONE: (916) 445-1920

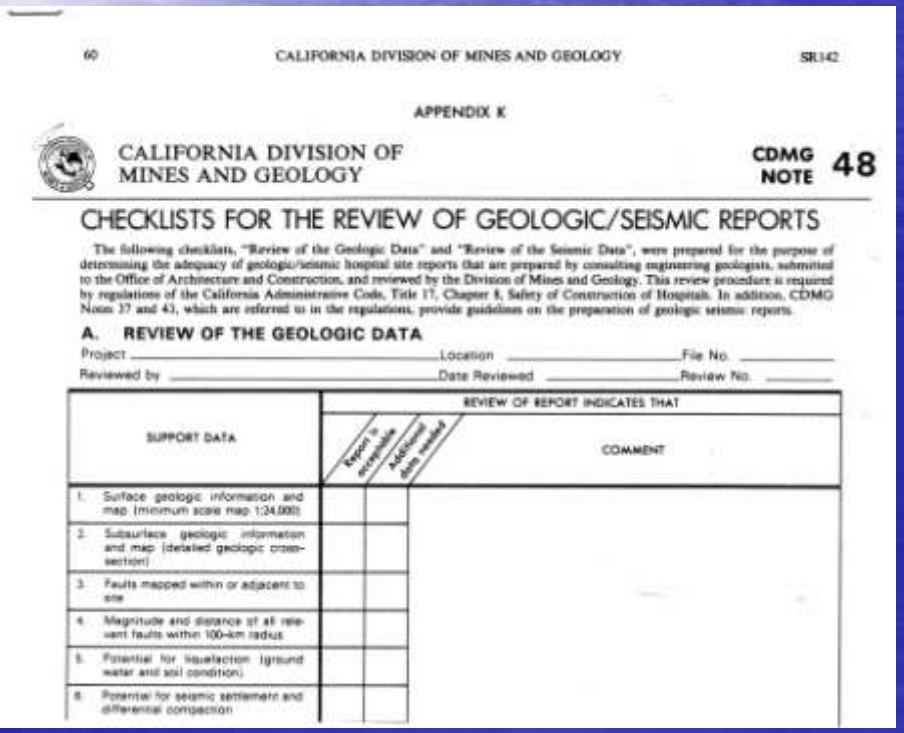
GEOLOGIC GUIDELINES FOR EARTHQUAKE AND/OR FAULT HAZARD REPORTS

I. General Information

These Board guidelines describe the scope of work normally done and suggest a format for reports. They do not include complete listings of techniques or topics, nor should all techniques described be used or all topics listed be dealt with in every project.

These guidelines are informational and are not regulations. Language used has been carefully gleaned of mandatory requirements. The guidelines have no force of law and do not set standards of practice. To be enforceable the guidelines would have to be adopted as regulations in accordance with the Administrative Procedure Act. On January 23, 1986, the Board passed the following resolution:

"The Guidelines have been adopted as useful information documents. Not having been adopted as regulations in accordance with the Administrative Procedure Act, the Guidelines are not legally enforceable."



60 CALIFORNIA DIVISION OF MINES AND GEOLOGY SR142

APPENDIX K

CALIFORNIA DIVISION OF MINES AND GEOLOGY — CDMG NOTE 48

CHECKLISTS FOR THE REVIEW OF GEOLOGIC/SEISMIC REPORTS

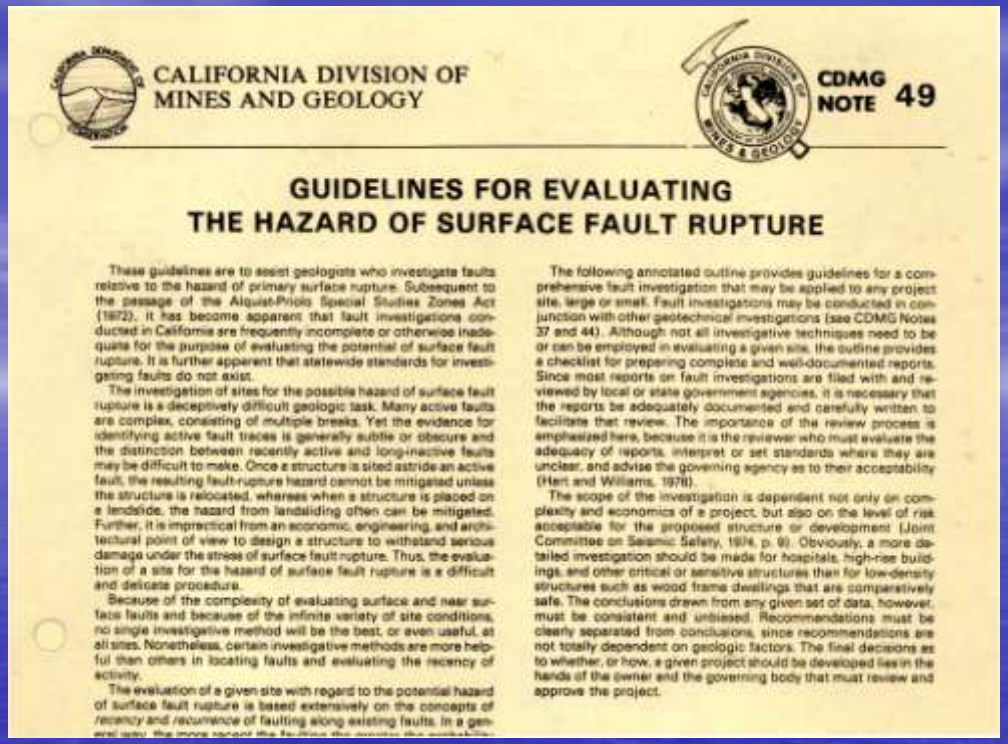
The following checklists, "Review of the Geologic Data" and "Review of the Seismic Data", were prepared for the purpose of determining the adequacy of geologic/seismic hospital site reports that are prepared by consulting engineering geologists, submitted to the Office of Architecture and Construction, and reviewed by the Division of Mines and Geology. This review procedure is required by regulations of the California Administrative Code, Title 17, Chapter 8, Safety of Construction of Hospitals. In addition, CDMG Notes 37 and 43, which are referred to in the regulations, provide guidelines on the preparation of geologic seismic reports.

A. REVIEW OF THE GEOLOGIC DATA

Project _____ Location _____ File No. _____

Reviewed by _____ Date Reviewed _____ Review No. _____

SUPPORT DATA	REVIEW OF REPORT INDICATES THAT: Report is acceptable	Additional data needed	COMMENT
1. Surface geologic information and map (minimum scale map 1:24,000)			
2. Subsurface geologic information and map (detailed geologic cross-section)			
3. Faults mapped within or adjacent to site			
4. Magnitude and distance of all relevant faults within 100-km radius			
5. Potential for liquefaction (ground water and soil condition)			
6. Potential for seismic settlement and differential compaction			



CALIFORNIA DIVISION OF MINES AND GEOLOGY — CDMG NOTE 49

GUIDELINES FOR EVALUATING THE HAZARD OF SURFACE FAULT RUPTURE

These guidelines are to assist geologists who investigate faults relative to the hazard of primary surface rupture. Subsequent to the passage of the Alquist-Priolo Special Studies Zones Act (1972), it has become apparent that fault investigations conducted in California are frequently incomplete or otherwise inadequate for the purpose of evaluating the potential of surface fault rupture. It is further apparent that statewide standards for investigating faults do not exist.

The investigation of sites for the possible hazard of surface fault rupture is a deceptively difficult geologic task. Many active faults are complex, consisting of multiple breaks. Yet the evidence for identifying active fault traces is generally subtle or obscure and the distinction between recently active and long-inactive faults may be difficult to make. Once a structure is sited astride an active fault, the resulting fault-rupture hazard cannot be mitigated unless the structure is relocated, whereas when a structure is placed on a landslide, the hazard from landsliding often can be mitigated. Further, it is impractical from an economic, engineering, and architectural point of view to design a structure to withstand serious damage under the stress of surface fault rupture. Thus, the evaluation of a site for the hazard of surface fault rupture is a difficult and delicate procedure.

Because of the complexity of evaluating surface and near surface faults and because of the infinite variety of site conditions, no single investigative method will be the best, or even useful, at all sites. Nonetheless, certain investigative methods are more helpful than others in locating faults and evaluating the recency of activity.

The evaluation of a given site with regard to the potential hazard of surface fault rupture is based extensively on the concepts of *recency* and *recurrence* of faulting along existing faults. In a general way, the more recent the faulting the greater the probability

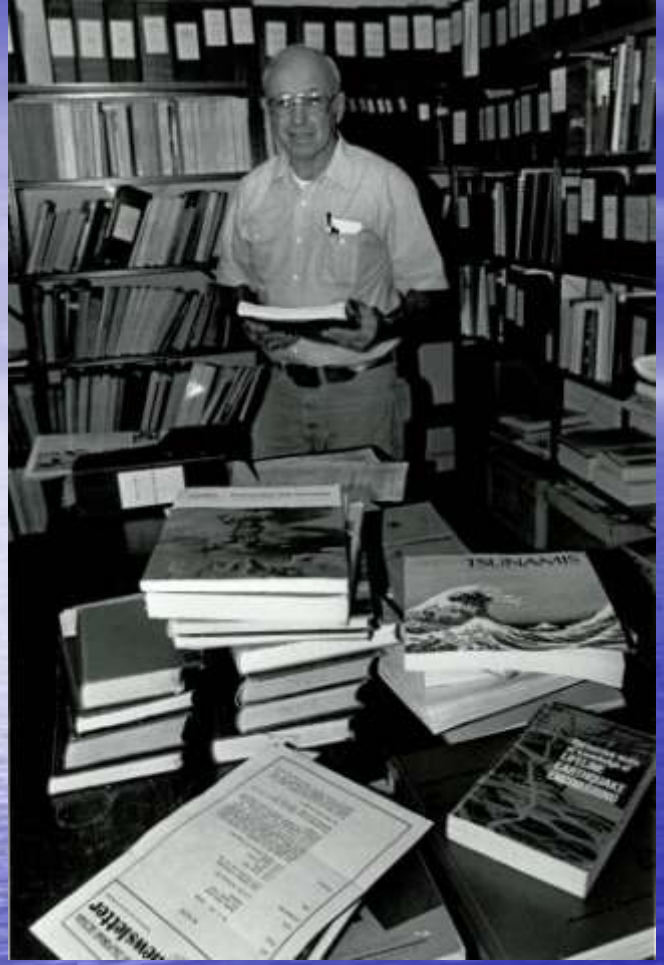
The following annotated outline provides guidelines for a comprehensive fault investigation that may be applied to any project site, large or small. Fault investigations may be conducted in conjunction with other geotechnical investigations (see CDMG Notes 37 and 44). Although not all investigative techniques need to be or can be employed in evaluating a given site, the outline provides a checklist for preparing complete and well-documented reports. Since most reports on fault investigations are filed with and reviewed by local or state government agencies, it is necessary that the reports be adequately documented and carefully written to facilitate that review. The importance of the review process is emphasized here, because it is the reviewer who must evaluate the adequacy of reports, interpret or set standards where they are unclear, and advise the governing agency as to their acceptability (Hart and Williams, 1978).

The scope of the investigation is dependent not only on complexity and economics of a project, but also on the level of risk acceptable for the proposed structure or development (Joint Committee on Seismic Safety, 1974, p. 9). Obviously, a more detailed investigation should be made for hospitals, high-rise buildings, and other critical or sensitive structures than for low-density structures such as wood frame dwellings that are comparatively safe. The conclusions drawn from any given set of data, however, must be consistent and unbiased. Recommendations must be clearly separated from conclusions, since recommendations are not totally dependent on geologic factors. The final decisions as to whether, or how, a given project should be developed lies in the hands of the owner and the governing body that must review and approve the project.

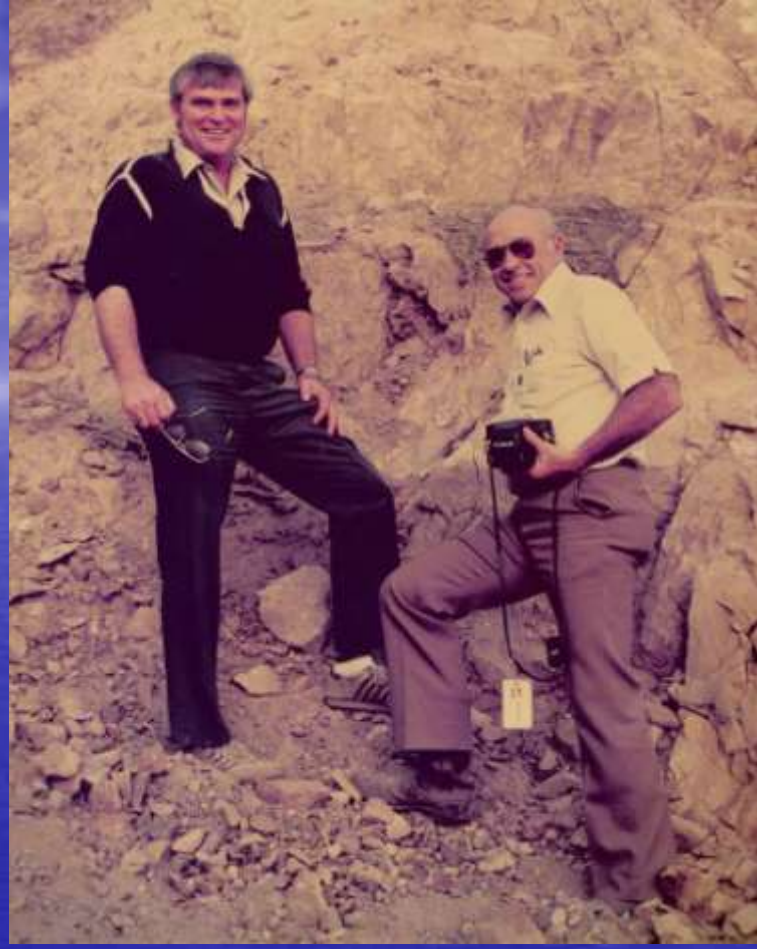
As State Geologist he introduced a series of *Guidelines for Practice*, which had enormous impact on raising the standard-of-care of engineering and environmental geologists, not only in California, but nation-wide.

- Jim's crowning achievement was the establishment of the California Seismic Safety Commission in 1975, an outgrowth of the Governor's Earthquake Council, shown here in May 1975. Governor Jerry Brown, shown here with Jim, approved the legislation creating the commission a few months later.

- These images show the first meeting of the Seismic Safety Commission in 1975, with Governor Brown attending. Jim was a charter member, serving from 1975-78, and again, between 1991-99.
- With his family still living in the San Fernando Valley and his leave of absence about to expire, Jim resigned his post as State Geologist and returned to Valley College in August 1975 and continued teaching part-time.

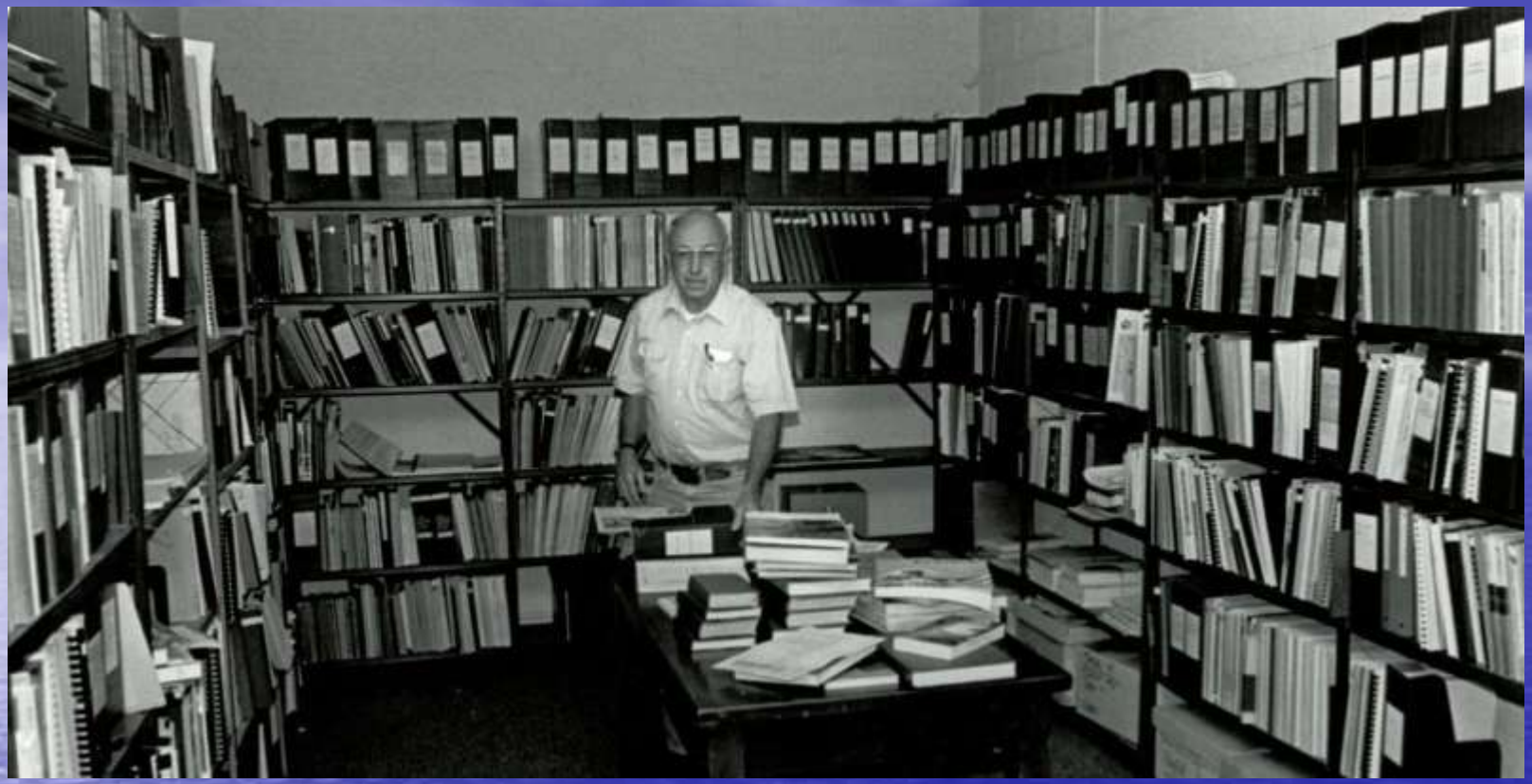


- Jim now focused his full-time energies on a new consulting firm he named Slosson & Associates, based in Van Nuys.
- Now 55 years old, he embarked on a career as forensic expert working with attorneys, peer reviewer for government agencies and municipalities, and maintained a stable of mainstream developer clients.

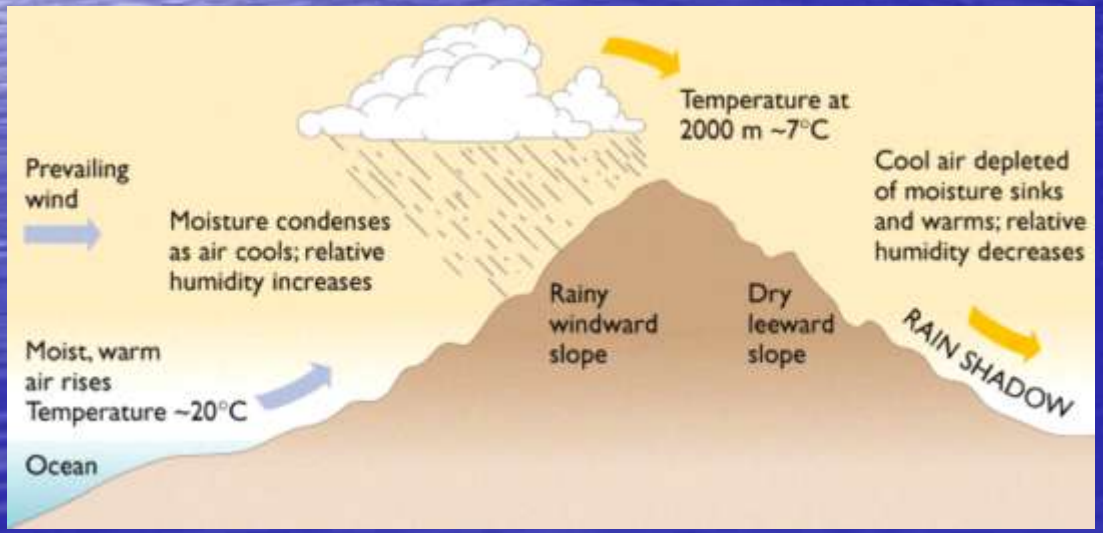


- **Dr. Slosson soon established himself as an effective expert witness, working on most of the high profile cases in southern California during the next two decades. These images show Jim with Doug Moran (left) and Mike Scullin, at the Big Rock Mesa landslide in 1978.**

- One of the most controversial advocacy projects Jim involved himself with was the proposed LNG terminal near Point Conception, shown here in 1980. The issue revolved around the mechanics of faulting.



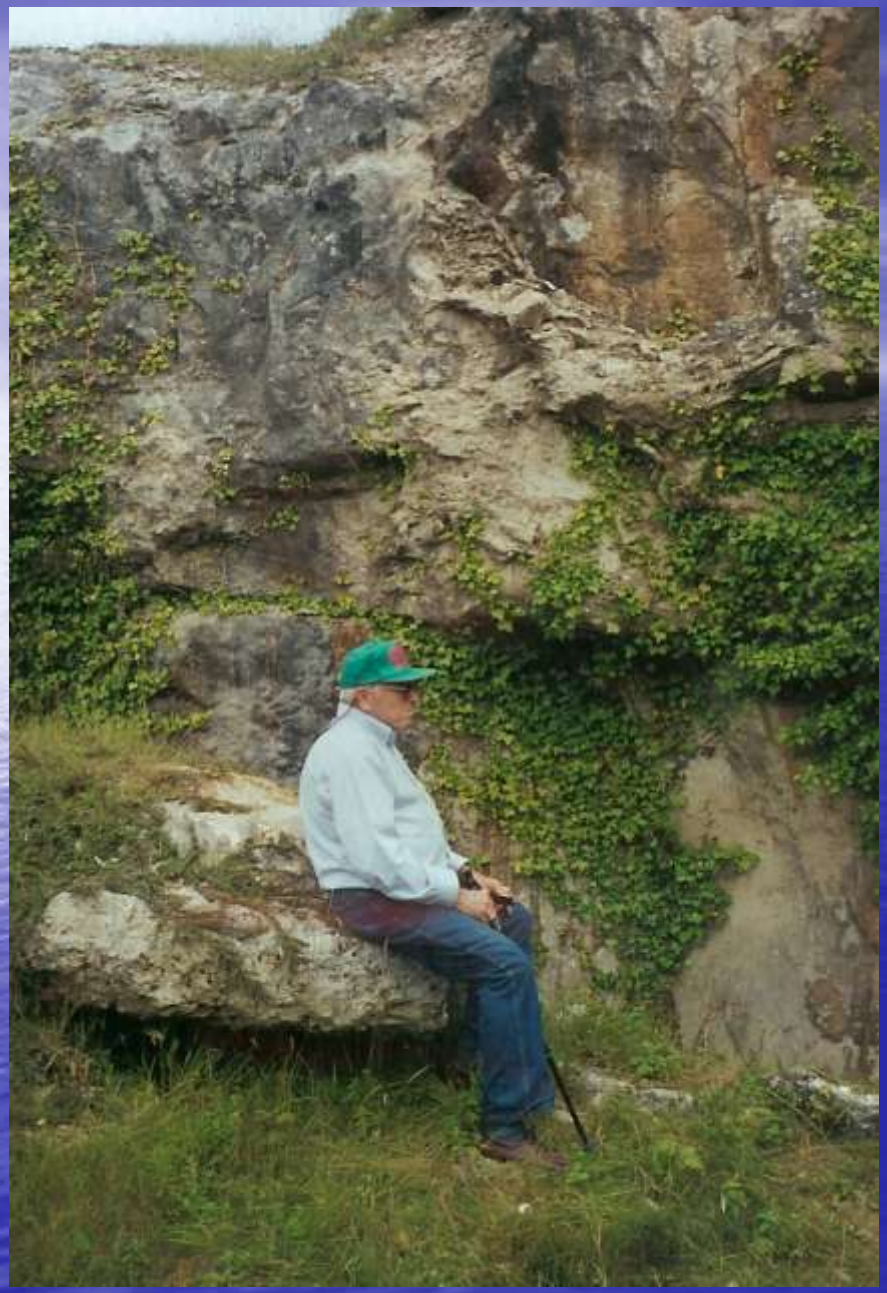
- Jim also had the distinction of being one of the plaintiff's experts in the Erin Brockovich case, which involved contamination of drinking water by chromium from a gas pumping station in the Mojave Desert near Barstow.
- The case settled in 1996 for $333 million, the largest ever paid in a direct action lawsuit in America until that time.



- In 1992 Slosson and civil engineer Gerald Shuirman collaborated to write ***Forensic Engineering: Environmental Case Histories for Civil Engineers and Geologists***, which was recognized by GSA's Burwell Award in 1997.
- It remains one of the classic texts on forensic engineering, fetching high prices on Internet trade sites years after it ceased being in print

Images from the family album reveal Jim's outdoor spirit. He always had a dog or two by his side, even at the office.

- **Jim was a loyal USC alumnus his entire life, never without an SC ball cap.**



Slowing Down

- Jim suffered a near-fatal stroke at the Portland AEG meeting in October 1997
- He recovered, but gradually slowed down the pace of his consultations, enjoying life
- This view shows him pondering an outcrop in Wales

- **Jim and Nancy Slosson were an inseparable team. The lived together 60 years, worked at the office together, and they departed this world together. Both died of congestive heart failure; Nancy on April 27th, and Jim on April 28, 2007, at age 84. Los Angeles will never be the same.**