Just before midnight in the evening of March 12, 1928, William Mulholland’s majestic St. Francis Dam suffered a massive collapse, causing a wall of water to travel some 55 miles to the Pacific Ocean and killing up to 600 people in the second worst disaster in California history.

But why did the St. Francis Dam fail? The headline in the Los Angeles Times of March 17, 1928, declared “FOUR INQUIRIES UNDER WAY IN VALLEY DAM DISASTER”.

In the immediate aftermath of the Dam break, up to 8 agencies began inquiries into the cause of the disaster, including Federal, State, County and City governments.

The most significant was the 2-week coroner’s inquest led by ambitious Los Angeles District Attorney Asa Keyes. Initial theories abounded as to potential causes, including earthquake, dynamite blasts by road workers, sabotage by the angry residents of the Owens Valley (who felt their water had been stolen by the City of Los Angeles with the completion of the Los Angeles Aqueduct in 1913), and inappropriate mixtures of sand and gravel aggregates with the cement used for the dam. District Attorney Keyes was intent on pinning the blame for the disaster on Mulholland. Keyes and the coroner’s jury relentlessly questioned Mulholland about the composition of the concrete, the selection of the dam site on an earthquake fault, the construction and drainage of the foundation of the dam, the anchoring of the dam to the walls of the canyon, and Mulholland’s unquestioned role in supervising the dam construction. He accused Mulholland of ignoring leaks in the dam in the days prior to the dam failure. When asked by Keyes if he would build the dam on the same spot again, Mulholland replied “No, I

Continued on Page 2
must be frank and say that now I would not”. Keyes pressed onward asking Mulholland why not. The reply “It failed, that’s why. There is a hoodoo on it...it is vulnerable against human aggression, and I would not build it there.” Mulholland himself suspected that the dam had been dynamited by an Owens Valley conspiracy ring to avenge the building of the aqueduct. Towards the end of his testimony, Mulholland humbly stated “Don’t blame anybody else, you just fasten it on me. If there is an error of human judgment, I was the human.”

VERDICT OF THE CORONER’S INQUEST

At the conclusion of the inquest, the coroner’s jury stated that “The destruction of this dam was caused by the failure of the rock formations upon which it was built, and not by any error in the design of the dam itself or defect in the materials on which the dam was constructed.” Although they expressed ambivalence about the inciting event leading to the collapse, the jury felt that the preponderance of evidence favored an initial failure on the western abutment of the dam, which was anchored to a rock called red (Sespe) conglomerate. During the inquest Keyes demonstrated how this rock disintegrates when exposed to water. They placed the blame squarely on the shoulders of William Mulholland and his Bureau of Water Works and Supply. They further attacked the sole reliance on Mulholland’s expertise in building the dam. This final jury statement made national headlines: “The construction of a municipal dam should never be left to the sole judgment of one man, no matter how eminent.”

J. DAVID ROGERS

Sixty four years later, Dr. J. David Rogers, Chair in Geological Engineering at the University of Missouri-Rolla, came to a different conclusion about Mulholland’s culpability when he used modern techniques to study the failure of the dam. In papers published in 1992 and 1995, Dr. Rogers determined that the dam’s collapse actually started on the eastern abutment where the dam, unbeknownst to Mulholland and his engineers, was anchored to an ancient Paleolithic landslide made up of a rock called Pelona schist. As the dam was filled up between 1926 and 1928, this unstable hillside became saturated with water, causing a massive landslide on the evening of March 12, 1928. The collapse occurred just five days after the dam was filled for the first time to near capacity on March 7. He also noted the failure to widen the base of the dam when its height was twice raised by 10 feet (total height 205 feet) in order to increase reservoir storage capacity. He showed that due to various deficiencies in the construction of the base of the dam, the structure, during the collapse, actually was lifted by the force of the water and tilted downstream in a phenomenon called “hydraulic uplift”. He noted that the famous center section of the dam, which remained standing, was the only portion of the dam built correctly with 10 uplift relief walls at the base. The landslide caused the entire eastern part of the dam to collapse first, with large blocks of the shattered portion of the dam carried across the downstream face of the main dam. The center section of the dam was then undercut, causing it to tilt and rotate toward the western abutment. This resulted in the collapse of the western portion of the dam as the epic flood waters raced down San Francisquito Canyon wreaking untold havoc and destruction.

Both the coroner’s jury in 1928, and Charles Outland in his landmark 1963 book “Man Made Disaster; The Story of St. Francis Dam” concluded that the blame for the disaster was primarily that of William Mulholland. Dr. Rogers, while criticizing Mulholland for not using outside consultants, and for raising the dam’s height in a dangerous fashion, did not find him at personal fault for the failure of the dam. Rogers stated, “Mulholland and his Bureau’s engineers belonged to a civil engineering community that did not completely appreciate or understand the concepts of effective stress and uplift, precepts just then beginning to gain recognition and acceptance.” To Rogers, the fault lay not with Mulholland, but with the lack of knowledge in his profession at the time regarding proper dam building.

PRIVILEGE AND RESPONSIBILITY

Yet the plot thickens. In 2004, Donald C. Jackson, Associate Professor of History at Lafayette College, Easton, Pennsylvania, and Norris Hundley, Jr., Professor of American History at the University of California, Los Angeles, published an article in the “California History” journal titled “Privilege and Responsibility, William Mulholland and the St. Francis Dam Disaster”. In this article, the blame has been shifted back to Mulholland. Jackson and Hundley point out that while Mulholland correctly placed drainage wells at the base of the center section of the dam, he chose to forgo this and other necessary procedures in the outer parts of the dam, ignoring the possibility of the uplift phenomenon in those sections of the dam as water seeped into the adjacent hillsides. The authors further point out that prior to 1910, little attention was paid to hydraulic uplift in dam building. However, concerns about the phenomenon began to be expressed in the late 1800’s and intensified with the collapse of a concrete gravity dam in Austin, Pennsylvania, on September 30, 1911 with the loss of at least 78 lives. The collapse of this dam was blamed on hydraulic uplift. Keeping this tragedy in mind, throughout the 1910’s and early 1920’s, several concrete curved-gravity dams across the country (all

Continued on Page 3
President's Message

Continued from page 2

prior to the St. Francis) were built to protect against the uplift problem with extensive grouting, placement of a drainage system along the length of the dam, and a deep cut-off trench. At least 3 technical books published in the 1910's pointed out the dangers of uplift and how to compensate for it. The article further states “By 1916-1917, serious concern about uplift on the part of American dam engineers was neither obscure nor unusual. Equally to the point, in the early 1920s, Mulholland’s placement of drainage wells only in the center section of St. Francis Dam did not reflect standard practice in California for large concrete gravity dams.”

Jackson and Hundley came to the conclusion: “Despite equivocations, denial of dangers that he knew - or reasonably should have known - existed, pretense to scientific knowledge regarding gravity dam technology that he possessed neither through experience nor education, and invocations of “hoodoos,” William Mulholland understood the great privilege that had been afforded him to build the St. Francis Dam where and how he chose. Because of this privilege - and the decisions that he made - William Mulholland bears responsibility for the St. Francis Dam disaster.”

Research sources for this article:

Catherine Mulholland, “William Mulholland and the Rise of Los Angeles”

Margaret Leslie Davis, “Rivers in the Desert. William Mulholland and the Inventing of Los Angeles”

Charles F. Outland, “Man Made Disaster. The Story of St. Francis Dam”

J. David Rogers, “Reassessment of the St. Francis Dam Failure”

J. David Rogers, “Lessons Learned From the St. Francis Dam Failure”, Geo-Strata, Volume 6, Issue 2, March/April 2006

Donald C. Jackson and Norris Hundley, Jr, “Privilege And Responsibility: William Mulholland and the St. Francis Dam Disaster”, California History, Volume 82, Number 3, 2004

Los Angeles Times, March 17, 1928

HAPPENINGS AT THE JUNCTION

Come see for yourself the ruins of the St. Francis Dam! On the 82nd anniversary of the disaster, local dam expert Frank Rock will be leading his annual lecture and tour to the St. Francis Dam site. The event will take place on Saturday, March 13. A free lecture will be held at 11:00 AM at the Saugus Train Station, followed at 12:00 PM by a bus tour to the dam site in San Francisquito Canyon. Cost of the bus tour is $35 per person. Be sure to bring comfortable walking shoes and clothing, as there is a 1 mile walk from the bus to the dam site and an optional uphill climb to the top of the dam. Don’t miss out, limited tickets are selling fast!! Call Pat Saleatore at 661-254-1275 for reservations.

On April 3, the Historical Society lecture series will return featuring Dr. David Lynch, author of “Field Guide to the San Andreas Fault”. Dr. Lynch will be taking us on a digital journey along the San Andreas Fault from Cape Mendocino to the Mexican border, with lots of information about the fault as it travels through our local area. Hang on to your seats! It’s going to be a bumpy ride at the Saugus Train Station, Saturday, April 3, 2010, at 2:00 PM! Admission will be free.

Also mark your calendars for our annual Chuckwagon Barbecue, the Society’s event as part of the 2010 Cowboy Poetry Festival. This year the magnificent cooks of Manflo Ranch will be returning to grill an authentic Western dinner for us. Entertainment will be provided by Joe Herrington and the popular group “The Sons and Brothers”. Tickets for the event will be $40 per person and can be purchased by calling 661-286-4021, or online at www.cowboyfestival.org. All proceeds will benefit the Historical Society. Please come and support your Society!

A hearty welcome to new Board members John Boston, and Sioux Coghlan. We are proud to have “Mr. Santa Clarita Valley” as a Director and look forward to his participation on the Board. Sioux will be taking over the Secretary’s duties from outgoing Board member Cathie Kincheloe. Thanks again Cathie for your many years of service to the Society. We also would like to thank Kristyn Van Wy for the great job she has done as the youngest member of the Board! Kristyn completed her term in December. You are welcome back any time!

The Society was saddened to hear of the passing of member John Margaretten recently. John has left to the Society a true legacy consisting of an entire library of books related to California history. Our library has literally doubled in size with this kind donation. We also thank Anna Kroll, with Master’s College, who has agreed to manage our library, and Leslie Bretall from COC, who is going to help again with the cataloguing. We appreciate the help of Cathy Martin, Tom Van Tassell, Linda Rehberger and others who packed and transported the books and shelving.

Thanks also go out to Francesca Gastill and Barbara Martinelli for refining and separating our Christmas decorations. Also, thanks to Mary Dobson for her work on our rose garden.

The year is off to a great start for the Historical Society. Thanks to all for your continued participation. See you all at the train station!

Alan Pollack
Hart Happenings by Ayesha Saletore

The Spring Season will bring many events to the Hart! Take a look below for some of the exciting Hart Happenings.

Jazz at Hart
Friday, March 19, 2010, 8:00 PM
Experience the Lori Andrews JazzHarp Trio in the beautiful Hart Museum! Jazz up your evening with harpist Lori Andrews who was described by Scott Yanow of “The All Music Guide to Jazz” as a musician who “shows that her delicate instrument can be used to produce swinging, soulful, funky and stomping music.” Reservations are required. Please call 661-254-4584 for ticket reservations. Ticket Price: $10 Members/$15 Non-Members.

US Postal Service Stamp Unveiled
Saturday, April 17, 2010
The United States Postal Service is releasing a set of four stamps entitled “Cowboys of the Silver Screen.” Of the four commemorative stamps, William S. Hart will be memorialized along with Gene Autry, Roy Rogers, and Tom Mix.

An Evening of Music with Dave Stamey
Friday, April 23, 2010, 8:00 PM
Tour Cowboy star Bill Hart’s historic residence and then relax in his living room, among his Remingtons and Russells, as 3 time Western Music Association Male Performer of the Year, Dave Stamey gives a rare, up close and personal concert. For ticket reservations or more information, please visit www.cowboyfestival.org or call (661) 286-4021. Tickets: $80 per person

Mr. & Mrs. Wyatt Earp
Saturday, April 24, 2010, 7:30 PM
A rare historical event in the intimate setting of cowboy star Bill Hart’s living room. Real life Earp relatives perform their new, award winning play based on the true story of Tombstone and Wyatt and Josie’s volatile relationship. For ticket reservations or more information, please visit www.cowboyfestival.org or call (661) 286-4021. Tickets: $35 per person

Music in the Mansion
Friday, May 7, 2010, 8:00 PM
Join us at the Hart Museum for a spring evening of music! Experience the talents of soprano Erica Lazerow and pianist Joshua Pifer as they perform a survey of musical pieces in the warm elegance of the Hart Museum. Ticket reservations are required. For more information and ticket reservations, please call the William S. Hart Museum at (661) 254-4584. Members and Students $10, Nonmembers $15

Hart Park - Rains of Mid-January by Cheryl Hazama

Hart Park sustained damage during the rains that occurred during Martin Luther King week. Sixty feet of fence along the railroad tracks tore off their posts when one of the trees was uprooted by the windy conditions and damp earth. That tree and others that fell from the rainy conditions included a beautiful spreading oak tree behind the Hart Ranch House, a tree along the one of the trails, and a couple in the in the campgrounds; one of them fell on a picnic table. The rains eroded the walking trails, and cracked the concrete partitions holding the earth behind Hart Hall. On January 20, the Park closed early because one of the storm drains clogged and overflowed - Norm Phillips, the Superintendent of the Park, cleared the drain out and prevented the water from coming into Hart Hall.
Books
by Pat Saletoire

We now have about twice as many books in our library collection as we did! This is no exaggeration, folks. John Margarettten, who passed away in October, told his sister that he wanted his SoCal history books to go to us.

Tom Van Tassell and Cathy Martin both brought their pickups...and Tom's is full sized. We had 4 more people helping to box and carry both books and the shelves they were on...two high school community service volunteers, Linda Rehberger (of scraping and painting fame) and myself. We have more than 1000 books in 65+ banker boxes in the Pardee house. These are not books that we can sell for a dollar on eBay, but books (some old and rare) on Southern California History. All of Monsignor Weber's books, Palou and Engeldhardt on the Missions, Bancroft...I saw two or three books on CRESPI!

Thank you John; we will miss you.

John Margarettten

Chuckwagon Dinner Show
by Carol Rock

Don't miss this feast for the Western senses that kicks off the City of Santa Clarita's Annual Cowboy Festival on Thursday, April 22, at 6:00 PM. The Chuckwagon Dinner Show features three working chuckwagons that will produce a delicious repast reminiscent of dinner out on the prairie. Demonstrations ongoing and questions encouraged!

The lead wagons come from the award-winning Manflo Ranch, recognized in national chuckwagon competitions year after year. See Montie Montana's show wagon, lovingly restored by Charley and Susie White of White Sky Ranch.

Entertainment for the evening will be provided by The Sons and Brothers, a family of Western singers in high demand for their Americana and family value performances. Tickets are $40 per person for the public; docents working the event may purchase dinner at a reduced price. To sign up and get more information, contact Carol Rock at rockmediascv@yahoo.com

A no-host saloon will be open; proceeds from ticket sales and refreshments will benefit the SCV Historical Society's restoration and community outreach efforts. For tickets, go to www.cowboyfestival.org or call 661 286-4021.

Recent Docents

Thank you to the following members who served as docents during January and February:

Laurie Cartwright  Barbara Martinelli
Sioux Coghlan  Barbara Milteer
Sarah Floyd  RuthAnne Murthy
Francesca Gastil  Alan Pollack
Harold Hicks  Pat Saletoire
Karen and Bill Limbaugh  Kristyn Van Wy

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Junior (18 & under)  $9.00

Memberships make great gifts for your historically-minded friends and family! To join or renew online, visit http://www.scvhs.org.
The San Andreas Fault: From Cape Mendocino To The Mexican Border

By Dr. David Lynch and Alan Pollack

Everyone has heard of the San Andreas Fault, but almost nobody knows what it is. Or where it is. Or what it looks like. Or what it means. In the Carrizo Plain there is little ground cover and the fault has shifted in historic times, so the fault is more beautifully exposed than any place in California. In other regions like San Bernardino, no major movement has recently taken place so urbanization has covered much of the fault's surface trace. Still, the San Andreas Fault is the most accessible plate boundary in the world. The mighty rift and its attending landforms are there for anyone to see. On Saturday, April 3, 2010 at 2:00 PM, the Santa Clarita Valley Historical Society will be presenting Dr. David Lynch, author of “Field Guide to the San Andreas Fault”, who as part of their Lecture Series, will present photographs and detailed maps that highlight the fault based on a series of driving trips from Cape Mendocino to the Mexican border, with emphasis on southern California. Copies of the “Field Guide” will be available for purchase and can be autographed by the author. The event will be held at the Saugus Train Station in Heritage Junction at William S. Hart Park, 24101 Newhall Avenue (formerly San Fernando Road), in Newhall, California.

The San Francisco earthquake of April 18, 1906, is widely known as the worst natural disaster in California history, with the loss of over 3000 lives, but it was not the biggest earthquake ever recorded in California. That distinction goes to the Fort Tejon earthquake which took place on January 9, 1857. The heaviest shaking of this colossal 7.9 magnitude quake was just some 40 miles northwest of Santa Clarita. As reported in the “Harper’s Weekly” illustrated newspaper of February 21, 1857, “At Fort Tejon and the Kern River district, the shocks were most disastrous, and had the country been thickly peopled, the consequences might have been fearful. The second shock at Fort Tejon was felt at half-past eight o’clock, and lasted from three to five minutes, resembling in sound the rumbling of a train of cars. Nearly all the buildings in the vicinity were seriously injured, and several narrow escapes are recorded. One life is known to have been lost. At a spot distant about twenty miles from the fort, the earth was upheaved, and exhibited the appearance of a very violent shock. Roads, in some places, were rendered impassable. It is believed that the earthquake was more severely felt at Fort Tejon than at any other point in the State, and it will require much time and expense to repair the damage done.” The rupture of the San Andreas fault in this 1857 earthquake extended from a possible epicenter at Parkfield, California near Cholame (the site of James Dean’s fatal auto accident) for a distance of about 225 miles to the Wrightwood area! Had this earthquake taken place today it would have likely caused far greater loss of life and damage as it passed through communities such as Palmdale, Lancaster and Frazier Park along with the greater Los Angeles metropolis and San Bernardino.

David Knight Lynch, Ph.D. will take us on a journey along this much feared fault as it stretches from Cape Mendocino to the Mexican border through the Southern California area. Dr. Lynch received a B.S. in Astrophysics in 1969 from Indiana University and a Ph.D. in Astronomy in 1975 from the University of Texas in Austin. He is Senior Scientist at The Aerospace Corporation, where he specializes in infrared spectroscopy of comets, novae, supernovae, young stars and very old stars. Dr. Lynch has also held research positions at Caltech, U.C. Berkeley and the United States Geological Survey. He has published over 150 scientific papers and 10 books, much of it based on observations from telescopes on Mauna Kea, Kitt Peak, Mt. Hamilton and in space. Dr. Lynch is also works with the USGS on plate tectonics with a focus on the southern San Andreas fault.

The Historical Society is pleased to host Dr. David Lynch at the Saugus Train Station. The general public is welcome. Admission will be free. For more information on this and other upcoming programs from the SCVHS, please call Pat Saletore or Alan Pollack at 661-254-1275. Website: www.scvhs.org.
Show Biz in SCV
by John Boston

For more than a century, the Santa Clarita Valley has been one of the planet’s great but mostly unknown entertainment centers. Films, TV shows, music videos, commercials and other visual media have been made here. Here is another look at show business in the SCV …

On February 6th, 1940, 250 locals signed a petition asking the Army to move their flying school out of the old Newhall International Airport (near where Granary Square is today). Seems the constant flights were bothering everything from cows to cowboys to movie stars. John Wayne, Trevor Howard and a crew from Republic Pictures had to walk off a movie set because of all the airplane racket. Oh. By the way, Newhall International got its name because it made one mail run into Mexico every two weeks.

A decade later, the brain of Wm. S. Hart was center stage at the estate trial of the famed silent film super star. Hart’s son, Bill Jr., had earlier showed up at his father’s cremation with a court order for the actor’s brain. An autopsy was performed and there was no evidence of any mental disorder in the dad — a crushing blow for his son’s case. This month in 1980, the U.S. Postal Service issued a new 15-cent stamp, honoring William Claude Dukinfield. You time travelers might know him better by his stage name - W.C. Fields. Why mention him? He used to live on 8th Street in the 1930s, leasing the home from silent film impresario, Charlie Mack. The home was called Rancho del Rey and was eventually sold to Cynthia Neal-Harris’s dad. Want to guess his name? W.C. Harris.

Fifty years ago this month, the Hart High band was the guest of honor at Disneyland. The marching musicians got to parade down Main Street in full band regalia. A new, experimental film with racy themes was playing at the old Mustang Drive-in Theater on Soledad back in 1970. Name of the debuting pix? “Easy Rider.”

90 years ago, local cowboy movie star Tom Mix starred in a silent called, “The Speed Maniac” on this date. It wasn’t even a Western.

The old Monogram Ranch, today called Melody Ranch, was home to a couple of movie shoots back in March of 1940. One was “Rip Van Winkle,” the other was “Tomboy.” They dammed up Placerita Creek to form a small lake for the Tomboy pix. Same week, Hall of Fame cowpoke Andy Jauregui was busy putting together one of the largest rodeos ever to take place in the SCV. Part of Jauregui’s show was a wild-horse riding contest in which cowboys roped a bronc in the arena, saddled, bridled and rode the beast for time with extra points divvied for survival.

Add another famous actor who lived in the SCV: In March of 1980, Keith Andes made Valencia his home. He starred in several movies and TV series, including “Star Trek.” But Andes was most famous for playing “The Man of La Mancha” on Broadway. He died in Castaic in 2006, living in a small trailer at a friend of mine’s back acreage.

“Cowboy” Bob Anderson and Bob Baker stayed on long enough to start their 4th annual local rodeo at the Baker Arena. The pair sold the ranch on this date to cowboy “B” movie star, Hoot Gibson on April 15th, 1930. The old spread used to cover 8,800 acres and, in the 1920s and ‘30s, hosted one of the country’s biggest rodeos, attracting tens of thousands of visitors. Today, that ranch is called the Saugus Speedway.

In March of 1930, the movie, “Abraham Lincoln” was shot in Hasley Canyon. Someone should have inspected the guns because one of them carried a live round, wounding one of the extras in the groin.

Ten years later in 1940, cowboy film star Tex Ritter (father of noted actor/comedian John Ritter) was in Placerita Canyon at Monogram Studios (today, Melody Ranch) to shoot “Riders of Sundown.” Check out the billing of his co-star: “In the supporting cast is Roscoe Ates, the celebrated stutterer…”

Teen vandals painted swastikas on the outside of the American Theater on Spruce back in mid-February, 1980.

March 19, 1950, the trial for the estate of William S. Hart continued. His former secretary, Frances Nelson, said the aging actor was despondent in his later years that his son and ex-wife never came to visit, and when they did, it was for money or favors. Gossip columnist Hedda Hopper was the star witness on this date, testifying that Hart was of sound mind when she visited him in his later years. They had talked about a barn dance they had held here in Newhall in 1916 with Douglas Fairbanks Sr.

Look for John Boston’s new web pages coming soon — thebostonreport.com and a monstrously humongous surprise project.
Lecture and Tour to St Francis Dam Site
by Carol Rock

As they have done for the last several years, the Santa Clarita Valley Historical will host a tour of the site of the St. Francis Dam Disaster in San Francisquito Canyon on Saturday, March 13, 2010 as a fundraiser for the Society.

The dam break is the second-worst natural disaster in the state of California: the failure of the St. Francis Dam on March 12, 1928 killed more than 450 people, leveled farms and homesteads, destroyed property and livestock, and changed the way dam safety was addressed forevermore.

“Dam Man” Frank Rock, considered an expert in the dam disaster, who has appeared on the Discovery and History Channels as well as local documentaries of the event, will give a short free lecture at the Saugus Train Station with an overview of the dam disaster, followed by a ticketed event, a three-hour motor coach tour of the dam site.

The lecture will start at 11:00 AM. The bus will leave Heritage Junction Historic park at 12:00 PM and return at approximately 3:00 PM. The tour includes snacks and the motor coach transportation. Mr. Rock will provide a historical narrative of the disaster during the bus tour.

The lecture will be free, while admission fee for the bus tour will be $35 per person. Tickets may be reserved by calling 661 254-1275 with credit card and contact information, or by mailing your ticket order to P.O. Box 221925, Newhall, CA 91322-1925. Mail orders must be received no later than March 8. Because this tour is a very popular fund-raiser, it is impossible to guarantee that seats will be available for purchase on the day of the tour. Order your tickets now!

PLEASE NOTE: The bus tour involves an approximately one-mile walk to the dam site and an uphill hike over the dam site. Please bring comfortable walking shoes and clothing. Participants should be in good health.