# Bay Area Mineralogists November 2017

Meeting: Wednesday, Nov 8, 2017; 7 pm USGS, 345 Middlefield Road, Menlo Park Building 3, 2<sup>nd</sup> Floor, Rm 3-237

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#### In this Issue:

- Program: Nevada DIY
- Jean DeMouthe
- Swiss Sewage
- Upcoming Shows & Coupons

The Bay Area Mineralogists meet monthly during the school year, on the 2<sup>nd</sup> Wednesday, at the U.S. Geological Survey in Menlo Park, on the second floor of Building 3, where the campus map says "Rambo Auditorium."

(http://online.wr.usgs.gov/calendar/map.html)
The front doors will be locked so you'll have to come up the exterior stairs on the Middlefield Road side of the building. Parking is free.

# November Program: Nevada, The Silver State

By ... Us!

We'll have a DIY meeting this month with the topic Nevada, The Silver State, so bring your favorite Nevada specimens and field trip experiences to share. Dan Evanich will take the lead with a short presentation (about 20 slides) from a recent visit to The Mackay Mining Museum at University of Reno, Nevada. The emphasis at the museum is heavy on silver (especially Comstock History and lore), so he will also bring a flat of Nevada silver and silver ore specimens to show. Many of us have made numerous collecting trips across the state line for a wide variety of materials. Please bring any of your Nevada specimens and plan to share the accompanying story with us. If you have a few Nevada slides (10-12 or so) that you'd like to show, bring them on a USB drive and we'll give you a turn on the projector.

## Jean DeMouthe, 1949-2017



Dr Jean DeMouthe passed away on October 29, following a long battle with cancer. She insisted on living "life as usual" as long as possible, including a trip to the Denver Gem & Mineral Show in September. We'll remember her as a friend and member of BAM and Crystal Gazers, and frequent attendee at our summer picnics.

Jean spent her entire 44-year career at the California Academy of Sciences, working her way from volunteer to the position of Senior Collections Manager in Invertebrate Zoology and Geology, where she was a continual, passionate advocate for the Academy's mineral collection and its recent return to the museum floor. Her contributions to science education and her friendship will be greatly missed.

Jean's sister says there will be a memorial, sometime after the 1st of the year. We'll provide the details as they become known.



Redbird Mine, Antelope District, Pershing Co NV



M G L Mine, Nightingale District, Pershing Co NV

# Switzerland's Golden Sewage

A news story making the rounds recently has to do with gold, silver and other metals in the sewage of Switzerland. It is to be expected that metals will be present in some quantity in many industrial waste streams, and with the recent developments in technology, rare earth elements are also increasingly present in the waste. Swiss researchers evaluated 64 municipal waste water treatment plants across the country and found an aggregate total of more than 6,600 pounds of silver and nearly 100 pounds of gold, along with lesser quantities of rare earth elements including gadolinium and niobium. The study estimated a value for gold in Swiss sewage sludge of around 1.5 million Swiss francs (\$1.5 million) every year, and a similar amount for silver.

They found that concentrations of metals in sewage vary widely across the county. Elevated amounts of ruthenium, rhodium and gold were



Majuba Mine, Antelope District, Pershing Co NV



Pershing County sunset

found in the Jura canton, presumably from the watchmaking industry that is centered there. Switzerland is a major gold-refining hub that handles an average of 70% of the world's gold annually. In the canton of Ticino, where there are several gold refineries, concentrations of gold in sewage sludge are sufficiently high for potential recovery; however, in other areas and for other metals, recovery and recycling would not be economically worthwhile. The study also reported that concentrations of the various metals evaluated were not at levels that would pose a risk to the environment.

Related work has been conducted in the U.S., where the USGS explored ways to remove potentially dangerous metals from treated sewage used as fertilizer, and also considered the possibility of extracting valuable metals from wastewater as a profitable resource.

# **Upcoming Shows**

#### November 4-5: Concord, CA

Contra Costa Mineral & Gem Society Centre Concord, 5298 Clayton Road

Hours: 10 - 5 daily <a href="CCMGS Show Coupon">CCMGS Show Coupon</a>

**SCMGS Show Coupon** 

#### November 18 - 19: Santa Cruz, CA

Santa Cruz Mineral & Gem Society Santa Cruz Live Oak Grange 1900 17th Avenue Hours: 10 - 5 daily

## November 18-19, Livermore CA

Lithorama,

Livermore Lithophiles Annual Show The Barn, 3131 Pacific Ave,

Hours: 10 - 5 daily

<u>Lithorama Information and Coupon</u>



