

# San Diego County Water Authority VE program sets chapter record

By George Bartolomei, CVS-Life

The 19 November 2008 San Diego Chapter luncheon registered 42 attendees from 24 different firms and agencies, a record number for a luncheon as long as the chapter has been keeping track of event participation.

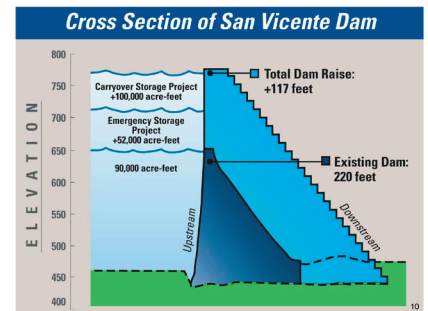
The subject of such interest was a presentation by Aaron Rouch, VE manager for the San Diego County Water Authority, providing an overview of SDCWA Capital Improvement Projects, with focus on the San Vicente Dam Raise, and recent structuring of the internal VE Program at the Authority.

Highlights of his talk included elements of the ongoing \$3.7 billion CIP effort to increase water collection, storage, and reservoir interconnecting pipelines that will ensure an adequate supply for San Diego County residents in the event of existing source interruptions.

Raising the San Vicente Dam by 117 feet will more than double its capacity, from 90,000 acre feet to over 242,000 acre feet. The VE study on that project

developed 86 ‘brainstorming’ ideas, and 24 will be implemented for a potential savings in excess of \$7.3 million, *plus* a number of ‘value added’ design suggestions. CVS leadership for the VE study was provided by the San Diego-based Value Management Institute.

The meeting concluded with a detailed discussion of the VE program at SDCWA, including a flow chart of project processing that showed when and how the need for VE studies were



identified, how VE teams were formed, and how results were tracked and audited.

Members of the design team for the Dam Raise project were also in the audience, so the question and answer period was active, and interesting, and attendees came away well informed on all elements of the presentation.

### VE Recommendations

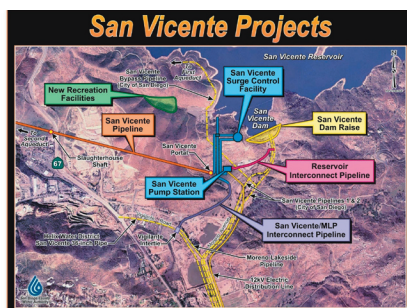
- Optimize Tunnel and Shaft Excavation – \$3.2 Million
- Steepen Rock Cut Slopes on Access Roads – \$2 Million
- Reduce Installation of Crack Inducer Plates – \$750k
- Reconfigure Drainage Galleries – \$484k

### VE Recommendations

- Increase Downstream Step Height - \$374k
- Use Alternate Fixed Cone Energy Dissipater – \$350k
- Repackage Existing Dam Surface Preparation – \$72k
- Move Underground Excavation to Package #2 – \$30k
- Use Rip Rap Downstream – \$7k

### Capital Improvement Program

- \$3.7 Billion – 80 Currently Active
  - Emergency Storage Project
    - Ph 1 - Olivenhain Dam, Pipeline, Pump Station
    - Ph 2 - San Vicente Pipeline / Pump Station
    - Ph 3 - Lake Hodges Pipeline and Pump Station
    - Ph 4 - San Vicente Dam Raise
  - All American/Coachella Canal Linings
  - Twin Oaks Water Treatment Plant
  - Relining and Pipe Replacement
  - Other



## Carrier installed as GMC director of academic relations

*This article was originally published in the November 2008 issue of The Connector, newsletter of the Greater Michigan Chapter.*

The Officers of The Greater Michigan Chapter of SAVE International are pleased to announce the recent approval and installation of Michael J. Carrier to the open position of Director of Academic Relations, effective 30 October 2008.

“I am very interested and excited about representing SAVE with Michigan’s universities”, Mike said. “Of particular interest is introducing value engineering and value analysis to business schools as well as expanding its role

in engineering school programs.”

Mike Carrier is an educator and value engineering consultant. During the 2007-2008 academic year, Mike was a visiting instructor in the department of supply chain management at Michigan State University where he taught undergraduate value engineering and purchasing courses and executive management workshops. Mike has extensive experience in cost reduction activities, including value engineering workshop facilitation, product development, process development and teaching systems engineering based target processes. Mike has been a member of SAVE GMC for just over a year, and is pursuing his AVS and CVS certification.