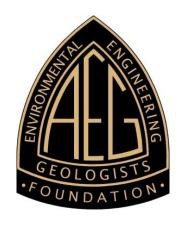
AEG FOUNDATION



CHARTER MARLIAVE FUND

RECOGNIZING OUTSTANDING SCHOLARSHIP AND PROFESSIONAL DEDICATION BY STUDENTS IN ENGINEERING GEOLOGY OR GEOLOGICAL ENGINEERING

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THE PURPOSE OF AEG FOUNDATION FUND CHARTERS

An AEG Foundation Fund Charter is a document adopted by the Board of Directors. It describes (as applicable)

- the history of a fund,
- donor intent,
- the purposes for which the fund may and may not be used,
- the Board's goals for the fund,
- administrative operating criteria, and
- financial operating criteria.

A Fund Charter demonstrates the Board's commitment to prudent management of the Foundation's resources and compliance with applicable law and regulation. Within the framework of AEG Foundation governance, a Fund Charter is a policy document that may be amended or interpreted by the Board through a simple majority vote. A Fund Charter may refer to other documents that further describe the operations and nature of a fund. Formal Resolutions of the Board that apply to a particular fund will be attached to the Fund Charter as appendices.

This revision of the Charter for the Marliave Fund was duly adopted by the Board of Directors of the AEG Foundation on September 18, 2012.

William K. Smith, Secretary	

FUND CHARTER MARLIAVE FUND

INTRODUCTION

The Marliave Fund of the AEG Foundation was established by the Foundation (then the Engineering Geology Foundation) in 1993 to accept administration of the Marliave Award then given up to that time by the Association of Engineering Geologists, which established its Marliave Fund in 1968. The Foundation also accepted AEG's Marliave Fund assets and the management responsibilities for that fund. AEG created its Marliave Fund to honor the memory, work, and contributions of Elmer C. Marliave (1910-1967) a founding member of the (California) Association of Engineering Geologists and a pioneering engineering geology consultant in water resources infrastructure design and construction. In early 2007, at the welcomed request of members of the Marliave family, the heritage scope of the Marliave Fund of the AEG Foundation was expanded to include honoring the memory, work, and professional contributions of Chester E. Marliave and Burton H. Marliave in addition to those of Elmer C. Marliave.

The careers and contributions of all three Marliave geologists are documented in Appendix One. A history of the Marliave Fund is provided in Appendix Two to this Charter.

ORIGINAL PURPOSE AND SCOPE

When started in 1968 by AEG, the purpose envisioned for the Marliave Fund was limited to a scholarship. The first Marliave Scholarship was awarded by AEG in 1986.

After the Foundation assumed responsibility for the Marliave Fund in 1995, the conceptual scope of activities that might be supported by the fund was expanded. Attachment 3B to the minutes of the Foundation Board meeting of March 28, 1996, reads:

2. Scholarship and Education Program [MARLIAVE FUND]: Originally established by the Association of Engineering Geologists, this program supports graduate and undergraduate scholarships and educational workshops in Engineering Geology and Geological Engineering. In addition to awarding grants and scholarships, this program has organized and sponsored K-12 Teachers Workshops at various locations since 1992. Future activities include organizing and sponsoring workshops on engineering geology specifically for engineers, workshops in continuing education for engineering geologists and geological engineers, and seminars in engineering geology at various institutions and society meetings. The program also plans to establish and publish standards for university level curricula for engineering geology and geological engineering.

Galster (see Appendix Two) notes that the Foundation apparently used the Marliave Fund to support one or a few Teacher's Workshops, but regarded scholarships as the primary purpose of the fund.

MODERN PURPOSE AND SCOPE

In discussions at its April 9-10, 2006, meeting the AEG Foundation Board of Directors took note of the need to build the dollar amount of the Marliave Scholar award to maintain its value and standing in both the overall field of scholarships in the geosciences, and in relation to the Foundation's other scholarship awards. Foundation funds created after the Marliave Fund was started covered the non-scholarship activities that were added to the Marliave Fund scope in 1996. Expending available Marliave funds for non-scholarship uses would decrease the funds available for Marliave scholarships. In initially adopting this Fund Charter by motion at the AEG Foundation Board of Directors meeting on April 9-10, 2006, the Board focused the purpose of the Marliave Fund entirely on scholarships. The 2007 revision of the charter recognizes all three Marliave geologists in the purpose and scope statement below as:

The Marliave Scholarship Fund honors the memory, work, and professional contributions of Elmer C. Marliave (1910-1967), a founding member of the Association of Environmental & Engineering Geologists, Burton H. Marliave (1917-1991), a president of the Association, and their father, Chester E. Marliave (1885-1958), a pioneer engineering geologist. The scholarship awards are grants intended to support academic activity and reward outstanding scholarship in Engineering Geology and Geological Engineering. Recipients of grants will be designated as "Marliave Scholars." Awards will be made by the AEG Foundation to outstanding students based on demonstrated ability, scholarship, potential for contributions to the profession, character, and activities in student/professional societies.

At the time of the 2007 revision to the Charter, the annual Marliave Scholar award was \$2,000.

FUND ADMINISTRATION AND OPERATION

General Conditions

Grants from the Marliave Fund are intended to recognize and support outstanding scholarship by students who are senior or graduate students in engineering geology or geological engineering programs. The Marliave Fund does not support general and administrative (overhead) costs, technical or scientific consulting fees, or equipment

purchase or maintenance costs of an educational institution employing or teaching individuals who receive grants from it.

Marliave Scholarship grants are not payment for services and are intended by the Foundation to be "qualified scholarships" as defined by the Internal Revenue Service. The AEG Foundation shall issue IRS Forms 1099 to scholarship recipients in accordance with IRS regulations. Recipients will be asked to provide the necessary information to complete the Form 1099 upon receipt of their grant. Recipients should consult their tax advisors regarding taxability of the grant.

In keeping with the Internal Revenue Code classification of the AEG Foundation as a 501(c)(3) charitable organization, the Foundation will not make grants supporting activities or publications that are designed to be used to influence political decisions or processes.

The applicant must be nominated or sponsored for the award by a faculty member, an employer or geoscience professional with knowledge of the applicant's qualifications. The applicant must describe current and anticipated future involvement in the Association of Environmental & Engineering Geologists.

The AEG Foundation Board of Directors will make, in its sole discretion, all decisions regarding disbursement of grants from the Marliave Fund, acceptance of donor conditions on gifts, and fund management.

In applying for a grant from the AEG Foundation, the grant applicant agrees to

- use the funds received from the AEG Foundation for the proposed use
- use the funds in accordance with applicable law and regulation
- avoid activities in the use of the funds that would jeopardize the AEG Foundation's tax-exempt status,
- provide the Foundation with a brief written report on the research sponsored by the grant (suitable for publication in the AEG News), and
- maintain membership in the Association of Environmental & Engineering Geologists during the life of the grant.

Application Review

The Application Form, available on the AEG Foundation web site or from the Marliave Scholar Fund coordinator, provides full instructions. Applications are reviewed by a Selection Committee. The chair of the Selection Committee shall be approved by the AEG Foundation Board. Awards will be made based on demonstrated ability, scholarship, potential for contributions to the profession, character, activities in student/professional societies, and other attributes considered important by the Committee. All decisions of the Committee are final. The committee may recommend no award if it chooses.

Management Protocols for the Marliave Fund

Recognizing the value of structured management of the funds, the Board initially adopted this Fund Charter and protocols for the management of Marliave Fund assets and earnings by a motion approved at its April 9-10, 2006, meeting. Accounting terminology in this Charter is intended to conform to Accounting Standards Codification (ASC).

The fund management protocols represent a desire by the Board to achieve long-term stability in the administration of the Foundation's assets and uniformity in the administration of its scholarship funds and programs. The objective of protecting certain funds from invasion is supported by implementing board-designated set-asides as the fund balance grows.

Marliave Fund Management Protocols

- 1. Unless otherwise specified by the donor, contributions to the Marliave Scholarship Fund are classified as Temporarily Restricted Net Assets in accordance with Accounting Standards Codification (ASC) until such contributions are expended for purposes consistent with this Charter. Earnings from contributions are classified as Unrestricted Net Assets, unless otherwise specified by the donor. The Fund may accept contributions with time or purpose limits consistent with this Charter. The Foundation's gift acceptance policy will apply. The Board may from time to time reclassify assets of the Fund in accordance with ASC, consistent with donor intent.
- 2. Identifiable costs directly related to the operation of the Marliave Fund may be expensed to the Marliave Fund.
- 3. The Board may assess an administrative support fee to assist in funding the Foundation's general administrative and fundraising functions.

GOALS ADOPTED BY THE BOARD OF DIRECTORS

Long-Term Use of the Marliave Fund

The Board believes that the Marliave Fund Purpose and Scope made a part of this Fund Charter are consistent with the Foundation's mission and authority. The Board believes that the Marliave Award should serve as the Foundation's most prestigious Award. Upon recommendation of the selection committee, the board may consider making Marliave Scholar awards at different academic levels if sufficient funding develops. These opportunities exceed the support level available from the present fund balance.

Fund Balance Goals

The Board sets the long-term funding goal for the Marliave Fund at \$100,000. For fund development purposes, this goal is divided into \$25,000 increments.

SCHEDULE FOR REVIEW OF CHARTER, FUND OPERATIONS, AND GOALS

The Board may maintain this charter unchanged or make revisions at any time. This fund charter shall be reviewed by the Board of Directors at least every five years on a schedule to be determined by the Board The Programs Committee shall prepare a review report with recommendations for consideration by the Board at that time. The Board may reclassify net assets described in this Charter under the concepts of ASC if additional information is brought forward justifying such reclassification.

REFERENCES

Galster, R. W., 1982. A History of the Association of Engineering Geologists (A Commemorative Review of the Association's First 25 Years). Bulletin of the Association of Engineering Geologists XIX (3): pp. 207-250.

Tepel, Robert E., 2006a, memorandum to AEG Foundation Board of Directors, Summary of *ad hoc* committee telephone conference call, May 17, 2006. 2 pages.

Tepel, Robert E., 2006b, President's Report, prepared for Board of Directors Teleconference Meeting May 26, 2006, AEG Foundation Program Funds: Donor Intent and Fund Operating Restrictions. 35 pages.

APPENDIX ONE BIOGRAPHICAL SKETCH OF THE THREE MARLIAVE GEOLOGISTS

A NOTE ON THE SOURCE OF THE BIOGRAPHICAL SKETCH

The biographical sketch of the three Marliave geologists that follows was written by John A. Zivnuska (1916-2002), a professor in the Department of Forestry (and later dean of the School of Forestry and Conservation) at the University of California, Berkeley. The biography was a part of his application to the United States Board on Geographic Names to name a peak in the western Sierra Nevada "Mt. Marliave" in honor of the three Marliave geologists. The Board accepted the application, and Mt. Marliave, elevation 7,140 Ft., is on the Soda Springs 7.5-minute Quadrangle at 39° 20' 54"N, 120° 24' 02"W. (In common with many other named places, the name itself does not appear on the quadrangle map.) John Zivnuska became a part of the Marliave family when he married Chester Marliave's daughter, Marion. Professor Zivnuska's biography of the three Marliave geologists was provided by Richard Marliave, and permission to publish it was verified by him with Louise Zivnuska. The AEG Foundation thanks them, and also thanks Jacqueline Marliave Mitchell for providing copies of Prof. Zivnuska's documents. The article is reproduced below as in the original, with only minor spelling and other changes.

Chester, Elmer, and Burton Marliave Engineering Geologists

By John A. Zivnuska Prof. of Forestry, Retired, University of California, Berkeley July 28, 1992

Chester Marliave (1885–1958) and his two sons, Elmer Marliave (1910–1967) and Burton Marliave (1917–1991) were engineering geologists who specialized in water-related structures including damsites, aqueducts, pumping plants, and tunnels. One or more of the three Marliaves worked on engineering geology studies directed to practically every major water development project in California during the period from the 1920s through the 1980s – projects which enabled the rapid economic growth of the state and which changed the appearance of the landscape over large areas.

Chester Marliave

Chester Marliave was born May 30, 1885, in San Francisco, California. He studied engineering and geology at the College of Mining, University of California, from 1903 to 1907. After an initial period of work for the Empire Mine, Grass Valley, California, he worked primarily on water projects. As both a geologist and a registered civil engineer, he worked on underground and surface water supply investigations, foundations for dams and appurtenant structures, tunnels, and construction materials.

His early assignments included work on the Atascadero water project and a period with the Spring Valley Water Company in San Francisco. During 1919 and 1920 he worked on ground water studies in Ignacio Valley. Next he worked for the California Division of Water Resources in ground water studies near Porterville. In 1923 he worked for the East Bay Water Company. He then returned to the Division of Water Resources, where he became the first chief geologist and continued until late 1938.

Following the catastrophic failure of the St. Francis Dam in the early 1930s, Chester Marliave was assigned as the Division's chief geologist to work with George Hawley, an engineer, in an investigation of the condition and safety of all dams in the state impounding significant amounts of water. These investigations extended over several years. Then in late 1938 he resigned from state employment to establish his own consulting business in engineering geology.

As a consultant headquartered in Berkeley, California, he worked mainly on water development projects both in California and in the other western states. During World War II he served as a consultant to the U.S. Navy and the Army Corps of Engineers, and during 1952 he worked on water development in Brazil. He continued actively involved in his consulting practice until shortly before his death on March 22, 1958.

Elmer C. Marliave

Elmer Chester Marliave was born on March 25, 1910, in Grass Valley, California. He received his A.B. degree in geological science from the University of California in 1932. He began working as a field assistant on damsite studies during his student years and following graduation he worked on various water projects.

In 1935 he joined the California Division of Water Resources as an engineering geologist. Following the resignation of Chester Marliave as chief geologist for the Division in 1938, Elmer Marliave was appointed as chief engineering geologist for the Division in 1939. He continued with the Division and its successor, the California Department of Water Resources, until 1956, except for a three year period of active duty in the Army as an artillery officer assigned to the Panama Canal Zone during World War II.

As chief engineering geologist he was in charge of all geological work performed by the Division and its successor Department, including studies of dams and reservoirs, ground-water basins, water-quality problems, and sea water intrusion. Much of his early work was concentrated on studies of ground-water basins throughout California. He was also the first geologist to inspect and prepare reports on numerous damsites. During the 1950s he directed a staff of engineering geology studies for the California State Water Project, encompassing Oroville Dam, 440 miles of aqueduct, pumping plants, power plants, tunnels, and other engineering features.

In 1956 he resigned from the California Department of Water Resources to establish his own private practice as a consulting engineering geologist. While he continued to be involved with water projects in California, he also worked on projects in other states and on numerous international studies throughout the world. His clients included international engineering firms, contractors, public agencies, and legal firms.

He was a Fellow of the Geological Society of America and was chairman-elect of its Engineering Geology Division at the time of his death. He was also a member of the committee of ten which founded the California Association of Engineering Geologists, predecessor to the Association of Engineering Geologists. He continued with a high level of activity in his consulting practice until the day of his death on September 24, 1967.

Burton H. Marliave

Burton Hampton Marliave was born in Berkeley, California, on September 19, 1917. He received his B.S. degree with a dual major in engineering and geology from the College of Mining, University of California, in 1939. Following his graduation, he worked for the U.S. Geological Survey in California and then for the U.S. Bureau of Mines in Utah. As a reserve officer in the Army Corps of Engineers, he was called to active duty shortly after the attack on Pearl Harbor and served in North Africa and Italy from 1943 to 1945.

Following his release from active duty with the Corps of Engineers in the fall of 1945, he joined the Pacific Gas & Electric Company as an engineering geologist assigned to the Feather River Project, where he worked on the Cresta and Rock Creek Dams. He resigned from P.G.& E. early in 1949 to join with his father, Chester Marliave, in his father's consulting business. As a consulting engineering geologist, he specialized in water-related structures including damsites, aqueducts, pumping plants, and tunnels, but also dealt with landslide and groundwater problems. He worked with his father for ten years, first as an assistant and then as a partner. The numerous projects on which he worked during that time included the engineering geology of the Austrian, Anderson, Briones, and Nacamiento dams and damsites in the Coast Ranges of California and the Railroad Flat, Comanche, and Donnels dams and damsites in the Sierra Nevada.

After his father's death in March, 1958, Burton Marliave continued as a consultant in engineering geology on his own. His clients included numerous public agencies (with the East Bay Municipal Utility District being one of his principal clients) and a variety of private firms. Supplementing his major water-related studies, he did site studies for various campuses of the University of California, including U.C. Berkeley, U.C. Santa Cruz, and U.C. San Francisco. Most of his work was in California, but he also investigated the Round Butte and Pelton damsites in Oregon and studied geologic conditions pertaining to dams and tunnels on the Guri project in Venezuela.

During the 1980s he also served as an arbitrator on complex cases involving engineering geology for the American Arbitration Association. He was active in the California Association of Engineering Geologists from its inception in 1957 and as president of the California Association for 1962 – 63 he became the first president of the Association of Engineering Geologists when the California Association reorganized without geographic limits at the end of 1962. He never fully retired, but continued with investigations for clients of long standing until his final illness and death on February 4, 1991.

APPENDIX TWO: FUND HISTORY

Donor Intent

The initial funding of the Foundation's Marliave Fund was by transfer of \$19,286.02 from AEG on February 1, 1995. In April 2005 the AEG Foundation Board of Directors reclassified (transferred on the books) \$20,000.00 from the Foundation's Greatest Need Fund to the Marliave Fund as a Board-designated set-aside. Other than these two major fundings, general contributions to the Foundation's Marliave Fund have been relatively small but steady. Review of Foundation records reveals no other specific expressions of donor intent. That is, the donors of those contributions expressed no intent other than what we may infer as a desire that their donations be used at the discretion of the board for the fund purposes.

Characterization of Restrictions in the Use of the Marliave Fund

Based on records research, early boards of the Foundation did not place specific restrictions on the use of funds or the income they generated in a formal or documented way, nor did donors require formal written documentation of their wishes. However, the Minutes of 16 January 1993 mention "...restricted funds such as the Marliave Fund [the only one currently designated]." In context, it seems most likely that the restricted nature of the Marliave Fund was part of the agreement transferring the fund from AEG to the Foundation, and in this sense the original fund corpus is either a Permanently Restricted Net Asset or a Temporarily Restricted Net Asset as defined in Statement of Financial Accounting Standards No. 117. However, no documentation of donor intent or restrictions has been found through the revision date of this Charter. Regardless, this obligation can be met by classifying the founding transfer as a Temporarily Restricted Net Asset and treating it as a Board-Designated Set-Aside.

Galster (2005, personal communication) states (in summary):

"In the early days the only fund that had any money at all was the Marliave that was transferred from AEG. In order to provide seed money for the early Teacher's Workshops at AEG meetings, the EGF Board agreed to appropriate money from Marliave. I believe such workshops broke even so that moneys were returned to that fund.... Having reviewed AEG minutes of that period (1968) I know that the Marliave was specifically created for scholarships. The fact that the EGF Board allowed some moneys for the teacher's workshops may have established a precedent for other uses, but does not negate the intended use of specific funds for specific purposes."

Based on 1) the retrospective provided by Galster (2005), 2) the Foundation's bylaws in effect through April 9, 2006, and 3) a study of all available Board Minutes and other records (Tepel 2006 a, b), it is reasonable to say that all general donations to the Marliave Fund after the original AEG donation have been appropriately treated as Temporarily

Restricted Net Assets, and all earnings have been appropriately treated as Unrestricted Support. In the absence of definitive and explicit documentation of donor intent or restrictions, the available record implies that is it reasonable to classify the original AEG donation as a Permanently Restricted Net Asset.

The Foundation's fund-raising literature does not make (and has not made) a promise that a donation to the Marliave Fund, absent specifically stated donor intent, will be treated as "restricted" in any way or that some specific percentage of the donation will be retained as an "endowment" in that named fund.

APPENDIX THREE: MARLIAVE SCHOLARS

Awarded by the Association of Engineering Geologists

- 1985 Michael McKim, Kent State University Brian Bergeron, South Dakota School of Mines and Technology Benjamin Smith, Washington State University
- 1986 Kerry D. Cato, Texas A&M University
- 1987 Brian G. Hansen, Colorado School of Mines
- 1988 Greg Naugle, Colorado School of Mines
- 1989 Anne E. Clift, Colorado School of Mines
- 1990 Katherine T. Clemence, Colorado School of Mines
- 1992 Andrea Volkman, Virginia Polytechnic Institute and State University
- 1992 Edmund Medley, University of California—Berkeley
- 1993 Francis X. Ashland, Colorado School of Mines
- 1994 Tariq Cheema, South Dakota School of Mines and Technology

Awarded by AEG Foundation

- 1995 Paul M. Santi, Colorado School of Mines
- 1997 Brendan R. Fisher, Radford University
- 2000 Martin Woodard, Kent State University
- 2001 Wei Zhou, University of Missouri—Rolla
- 2002 Ala Hajdarwish, Kent State University
- 2003 Jessica Pence Humble, Colorado School of Mines
- 2004 Dawn A. Schippe, Colorado School of Mines
- 2005 Hiram Henry, Portland State University
- 2007 Adam Prochaska, Colorado School of Mines
- 2008 Diana Cook, Colorado School of Mines
- 2009 Stephanie A. Mrozek, University of Alaska—Fairbanks
- 2010 Rachel A. Pirot, Portland State University
- 2011 Tej Gautam, Kent State University
- 2013 Julien Cohen Waeber, University of California—Berkeley
- 2014 No award
- 2015 Lauren Schaefer, Michigan Technological University
- 2016 No award
- 2017 Robert Huber, South Dakota School of Mines
- 2018 Stephen Semmens, Colorado School of Mines

APPENDIX FOUR: BOARD RESOLUTIONS AND MOTIONS

04/10/2006	Original Charter approved by the AEG Foundation Board of Directors.
04/15/2007	Charter revised to recognize the contributions of all three Marliaves
04/09/2011	Selection Committee chair to be approved by the Board. Revised schedule of Charter review to at least every five years. Reclassified assets to Temporarily Restricted and Unrestricted.
02/29/2012	Changes to Fund Management Protocols.
09/18/2012	Changes to application requirements.
05/15/2018	Updated recipient names and universities