

Layout & Design

GUIDELINES

for Marina Berthing Facilities

July 2005

~ Arnold Schwarzenegger, Governor, State of California ~

~ Mike Chrisman, Secretary, Resources Agency ~

~ Raynor Tsuneyoshi, Director, Department of Boating and Waterways ~

P R E F A C E

The engineering staff of the California Department of Boating and Waterways (DBW), Division of Boating Facilities, began writing marina berthing guidelines in the 1960s. Used over the years in the Local Assistance Loan Program, the guidelines provide technical assistance in the development of California public marinas. Originally brief and rudimentary, the guidelines have grown in scope and sophistication over the years.

The first “official” edition was dated 1968 and was incrementally revised and expanded in 1972, 1976, 1980 and 1984. The planned revision for 1988 was put on hold pending the anticipated passage of the Americans with Disabilities Act (ADA) which occurred in 1990. In 1991 the Americans with Disabilities Act Accessibility Guidelines (ADAAG) were published by the Architectural and Transportation Barriers Compliance Board (ATBCB, popularly known as the Access Board) in Washington D.C. Unfortunately, ADAAG Section 15, designated to address accessibility to recreational facilities, was “reserved” (left empty) pending further research, investigation, and public hearings by the Access Board and its staff. ADAAG 15.2 for recreational boating facilities was eventually published in 2002. In 2004, ADAAG was merged with guidelines from the 1968 Architectural Barriers Act (ABA), creating a new document known as ADA-ABA, now under review for approval by the U.S. Department of Justice. This set the final stage for the publication of the 2005 edition.

Working under the direction and supervision of Mr. Steve Watanabe, P.E., Chief of the Boating Facilities Division, the principal author of these GUIDELINES is Mr. Bill Curry, Supervising Civil Engineer (retired). Bill first began working on guidelines in 1968 for the Department of Harbors and Watercraft, which became the Department of Navigation and Ocean Development in 1969, and finally the Department of Boating and Waterways in 1979. Over the past 37 years, Bill worked with Department staff and marina professionals throughout California in pursuit of excellence in the crafting and application of guidelines. A well-deserved word of thanks is extended to those persons, agencies and organizations that participated in the process of guidelines development over the years, and to the current Boating Facilities Division staff who reviewed and commented on several drafts of this latest guideline document.

As Director of the California Department of Boating and Waterways, I extend my thanks to Bill Curry for his diligent work in producing this document. It will benefit engineers, architects, contractors, officials, marina owners and operators, and the recreational boating community statewide. Therefore, as a capstone for his distinguished career, I dedicate the **2005 Layout & Design GUIDELINES for Marina Berthing Facilities** to Bill Curry, P.E. (Retired) for the California Department of Boating and Waterways.

Raynor Tsuneyoshi, Director
California Department of Boating and Waterways

Special Acknowledgment

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I N T R O D U C T I O N

The primary purpose of the Layout and Design GUIDELINES for Marina Berthing Facilities is to provide technical assistance and direction in the planning, design and construction of marina berthing facilities funded under the various Local Assistance and Capital Outlay Programs administered by the Department of Boating and Waterways, Resources Agency, State of California. The GUIDELINES address typical conditions and are not intended to be all inclusive or absolute. Unique site conditions and circumstances may require special analysis, applications and design considerations not addressed herein.

The information in the GUIDELINES is useful for recreational boating facility issues in general, and will be helpful to anyone involved in the development of both new and altered boating facilities.

The GUIDELINES do not address site selection considerations for proposed new marinas, site considerations for expansion of existing ones, environmental practices, fish cleaning stations, boat engine oil recovery facilities, recycling, or permitting issues. Those matters are beyond the scope of this document.

In the presentation of layout and design criteria, the following convention is used:

- criteria printed in “standard type” are recommended general criteria; and
- criteria printed in “***bold italics***” are mandatory minimum safety or barrier-free access criteria.

It is recognized that in certain isolated instances, the application of mandatory minimum safety and accessibility criteria may not be feasible, desirable or even possible. A better alternative may exist that will not jeopardize safety or accessibility, and is judged to be equal to or better than the mandatory criteria presented herein. Deviations from the mandatory minimum criteria will be considered on a case-by-case basis jointly by the project owner, staff of the Department of Boating and Waterways, and the permitting agency(s) issuing the building permit(s). Individual project owners/operators will bear the responsibility to clearly document the rationale for any deviation(s).

It is not intended that deviations from either the recommended general criteria or the mandatory minimum safety and access criteria be used to justify wholesale departures from the advice, direction, experience and criteria presented herein. To varying degrees, the GUIDELINES represent the collective experience and wisdom of boaters, harbor masters, manufacturers, material suppliers, designers, engineers, consultants,

contractors, marina owners and operators, government officials, and various other persons and groups representing both public and private interests compiled over a period of four decades from the 1960s into the early 2000s. The intent is that the GUIDELINES will be a reliable guide for the layout and design of marina berthing facilities.

The GUIDELINES may be viewed and/or downloaded from the Department's web page as indicated below. However, it is requested that the GUIDELINES be used as a complete document, and not be edited, altered or changed in any way from its officially published form.

www.dbw.ca.gov

Should you wish to submit comments, corrections or suggestions to be considered in future editions of the GUIDELINES, or obtain hard copy of this current edition, contact the Department via the Internet, or as indicated below.

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COMMENTARY FLAGS

Throughout Sections B - G, the “C” symbol in a **double-framed blue box** seen in the right margin will be seen to the right of particular sections and sub-sections. This is a “flag” indicating that commentary is provided in Appendix A on the particular subjects flagged. The commentary headings in Appendix A cite the section and sub-section references, thus providing a two-way reference system.

