Price \$3.00

Crystal Lake Life or Death

Must Reading About Polution in Crystal Lake

Non-Technical - Concise



Sponsored by the Ad Hoc Committee of Board of Public Works, Benzie County, Michigan

> Author R. William Decker

FRONT COVER

Photograph taken by the author, October, 1986, on the beach at his home located on the west shore of Crystal Lake of King Salmon after spawning in the shallows. This fish entered the Lake by jumping the dam at the outlet or is a descendent of fish which had entered the Lake in a similar way several years ago. Pollution was not the cause of death, but the photograph was chosen as an apt symbol for the possible destiny of the Lake.

BACK COVER

NASA Photograph from 60,000 ft. altitude of Crystal Lake and surrounding area. Infra-red processing renders soil and trees as shades of red.

ACKNOWLEDGEMENT

We are deeply grateful to those individuals of the *Ad Hoc* Committee (1*) and other area residents who have financially underwritten the largest share of the cost of printing this book. Theirs was an act of faith, indicating trust and confidence in the author and the hoped for impact of publication.

Printed in U.S.A. 1987

BIBLIOGRAPHIC REFERENCE

Decker, R. William, Chair, Ad Hoc Committee, Benzie County Board of Public Works, "Crystal Lake - Life or Death", Benzie County, Michigan, 1987, 32 pp + 8 figures.



R. William "Bill" Decker (1934 - 2009)

Members of the original Ad Hoc Committee (which became the Crystal Lake Clean Water Committee):
R. William Decker, Chairman; Joanne and Alan Applehof, Larry Bibbee, Howard Greene, Ralph Hand, Bob Long, Karl Martz, Max Mattison, Larry Sykora, John Vincent, Inez and Frank Zaring. Stacy L. Daniels joined the CLCWC.

ABOUT THE AUTHOR

Viewing the blue waters of Benzie County's Crystal Lake from the hills is a beautiful sight. Other ways to appreciate this glacial gift are on the shores, from a boat, from the air, or even from a diver's view under water. R. William (Bill) Decker has observed this Lake since 1951 from all these aspects. A native of Michigan with homes in Grand Rapids and Crystal West Shore, his interest as shared by many others is in maintaining what we have - a beautiful body of water.

When approached by the Benzie County Board of Public Works to chair the Ad-Hoc Committee dedicated to take some action for the preservation of the quality of the Lake, he accepted knowing first hand that education of the land owners and general public was the first and foremost need.

Bill's engineering background and contractor designer profession instinctively told him to investigate all of the studies made during the last 19 years and in so doing found a need to summarize and make meaningful the implication of the previous studies and reports.

After presentation to the Committee of the outline for the text, he has spent months developing a readable volume.

Robert Long

NOTE TO CURRENT READERS 2*

As a prototypical Lake Owners' Manual, *Crystal Lake - Life or Death (CLLD)* is a significant book. It resulted from discussions by local citizens who formed an *Ad Hoc* Committee to the Benzie County Public Works Department. This Committee raised two issues: (1) present and future water quality problems of the Crystal Lake Watershed, and (2) absence of an equitable and effective plan for watershed management (3*). At the time of its original printing in 1987, *CLLD* was one of the first Lake Owners' Manuals developed for riparian owners and visitors in Northwest Lower Michigan. It specifically addressed environmental issues facing the Crystal Lake Watershed (Benzie County, MI). *CLLD* has served well as a model for other Lake Owners' Manuals throughout Michigan. Its basic messages remain timely and are shared by many riparian communities. Written in plain, non-technical language, the original text touched upon many issues: the water quality of Crystal Lake and Cold Creek, the impact of nutrients on the Watershed, the often opposing forces of government and development, the requirements of good septic systems, and the need for continued public education.

Crystal Lake, the 9th largest inland lake in Michigan, appears unchanged to the passing eye of history. Its long-time attraction as a major recreational resource has continued unabated for more than a century. Land and water use and development within the Watershed continues to intensify, however, and the needs for environmental sustainability and watershed management are very relevant. In the intervening 15 years since *CLLD* first appeared, new issues have arisen, such as intensified shoreline and ridgeline developments and invasions by exotic species, such as Eurasian Watermilfoil and the Zebra Mussel. These issues have been addressed in several collaborative monitoring studies conducted by qualified environmental professionals from local environmental organizations, and local and state government agencies.

The original intent of *CLLD* was education of property owners, riparians, and visitors. Annual "Updates" were provided by the *Ad Hoc* Committee, the Crystal Lake Clean Water Committee, The Crystal Lake Watershed Fund, Inc., which merged with the Crystal Lake Association into the Crystal Lake & Watershed Association (^{4*}) with its Science Review Panel (SRP) (^{5*}). This tradition of public education has been continued to date in Crystal Whitecaps, the CLWA newsletter.

This edition of *Crystal Lake - Life or Death* is for reflection by previous readers, and for discovery and contemplation by new readers. It is reproduced here in its entirety (with minor editing and additional annotations) $\binom{6*}{}$.

Dr. Stacy L. Daniels, Crystal Lake & Watershed Association, (14 Sep 2013, as revised from note of 22 Jan 2002).

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^{2*} Addendum to the original publication. See also BCRP 98(42), 1-2 (05 Aug 1987) Pollution plan gets approval.

³* A Watershed Management Plan for the combined Betsie River/Crystal Lake Watershed was commenced in 2013.

^{4*} The Crystal Lake & Watershed Association (CLWA) (<u>www.CLWA.us</u>) is a nonprofit (501c3) organization of concerned local citizens and environmental professionals committed to protecting the integrity of Crystal Lake, Benzie County, Michigan, for the enjoyment of future generations. It was formed in 2004 upon merging the Crystal Lake Watershed Fund, Inc. (CLWF), and The Crystal Lake Association (CLA). It supports citizen initiatives for water quality monitoring, septic system control, sustainable development, and land conservancy through education, for watershed management.

The Science Review Panel (SRP) of the CLWA, an *ad hoc* group whose individual members develop consensus viewpoints upon review of environmental issues of particular local interest and by providing scientific recommendations.

^{*} Supplemental footnotes in this reproduction are marked with (*) to distinguish them from the original footnotes.