

This article was downloaded by:

On: 15 January 2011

Access details: *Access Details: Free Access*

Publisher *Taylor & Francis*

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



Chemistry and Ecology

Publication details, including instructions for authors and subscription information:

<http://www.informaworld.com/smpp/title~content=t713455114>

A review of: “The Uses of Ecology-Lake Washington and Beyond”

University of Washington Press, Seattle, Wash., Usa. 352 Pp., 16 Illus., Map, Bibliog., Index. Isbn 0-295-97024-3, Price \$19.95.

To cite this Article (1992) 'A review of: “The Uses of Ecology-Lake Washington and Beyond” University of Washington Press, Seattle, Wash., Usa. 352 Pp., 16 Illus., Map, Bibliog., Index. Isbn 0-295-97024-3, Price \$19.95.', *Chemistry and Ecology*, 6: 1, 271 – 272

To link to this Article: DOI: 10.1080/02757549208035277

URL: <http://dx.doi.org/10.1080/02757549208035277>

PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.informaworld.com/terms-and-conditions-of-access.pdf>

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

BOOK REVIEW

The Uses of Ecology – Lake Washington and Beyond, University of Washington Press, Seattle, Wash., USA. 352 pp., 16 illus., map, bibliog., index.
ISBN 0–295–97024–3, Price \$19.95.

Professor Edmondson completes a lifetime study of the science of limnology with publication of his Jessie and John Danz lectures to the University of Washington.

The major part (Parts 1 and 2) of this book provides the now classic story of the progressive eutrophication of Lake Washington through to its recovery some thirty-five years later. Edmondson's account of the scientific, administrative and political battles engaged during the deterioration of the lake and the creation of Seattle's METRO agency, fired by "people power", is a telling example of the necessary integration of fundamental scientific understanding with practical and effective engineering solutions.

Lake Washington is an eighteen mile long lake on the eastern edge of Seattle. Initially a clear and pristine lake, with growth of the city to become the "Pittsburgh of the West", the lake developed water quality problems, not because of local industry, but from the city's discharge of sewage. By 1922, there were 30 raw sewage outfalls meeting the needs of 50 000 city dwellers. Some improvement came during the 1940s when some was pumped to the coastal waters of Puget Sound, but deterioration continued until in the 1950s the lake become foul and inhospitable to most aquatic life, and citizen amenity was at risk. In 1958 a public vote was cast for action and the METRO (Municipality of Metropolitan Seattle) agency was born.

As a scientist and a city resident, Professor Edmondson was directly involved, not only in reporting and assessing the adverse changes taking place in the lake, but also in promoting public education on this and associated issues, and further, helping to instigate public campaigns for the necessary actions for lake recovery. The latter called for a depth of knowledge and experience, and clear, objective, scientific judgement, as well as a cool head, since the city, its industry, and its people wanted to be sure that their local tax "to clean up the lake" would be well used. In the event, Lake Washington's recovery became evident by 1976, only eight years after all waste disposal to the lake was stopped.

In telling this complex, at times gripping story, Edmondson illustrates many of the basic scientific principles of limnology, especially those relating to the phenomenon of eutrophication, a problem world-wide when populations exceed measures to control their wastes. There are also asides stemming from other water pollution problems – the battle to ban "hard" phosphate detergents in the Great Lakes area, the argument that C not P was the cause of eutrophication there, the curiosity of the "soap lakes" in the Grand Coulee. The book continues with some wise comments on other, more recent, controversies regarding acidification, air pollution consequences to fresh waters, and the greenhouse effect. However, these later sections lack the fire and conviction arising from direct involvement in the Lake Washington story.

While nothing like a standard text on eutrophication, the book makes good

reading and could stimulate budding limnologists wanting to save the world's waters; their teachers might be happy to use some of the examples of the consequences of limnological processes for their lectures. For the environmentally interested citizen, the story of the METRO battle will compensate for the occasional diversion into the limnological depths. At such a modest price, it could find its place on many bookshelves, although European readers may not find it easily in the bookshops.

G. Howells
15 November 1991