

## *Water Resources Research: The Twentieth Year*

1984 marks the beginning of the twentieth year of *Water Resources Research*. Under the founding editors, Allen V. Kneese and the late Walter B. Langbein, and a distinguished group of Associate Editors, *WRR* was first published as a quarterly journal. The initial issue contained 13 articles, the first by (now Nobel Laureate) Kenneth J. Arrow. The journal provided an excellent balance between the policy and physical sciences. Over the intervening years, the relative mix of subject matter has fluctuated; in recent years there has been a noticeable increase in the number of papers devoted to the policy sciences. This increase is largely the result of the care and energy with which Jerry Cohon discharged his duties as coeditor. In his recent farewell editorial he commented on the apparent health of the journal. The health of *WRR* results in no small measure from his activities. The entire community is indebted to him for his outstanding leadership and service.

Everyone concerned with publishing *WRR* works to make the transition between editors run as smoothly as possible. When I became editor designate in August 1980, Al Freeze was exceedingly helpful in ensuring that the functions of the editorial office were established effectively in Seattle. He graciously suggested a few things from his experience that he thought would be useful to know but did not attempt to influence my approach as an editor in any way. It was always comforting to know that I could seek his sage advice. In September 1980, Jerry Cohon travelled to Seattle, and we had the opportunity to discuss at length our thoughts on how we should work as co-editors. From that initial meeting we had an exceptionally valuable working relationship; Jerry's counsel was much appreciated.

In keeping with the spirit of cooperation with which Al handed over his editorship to me, Jerry has likewise passed the editorship for policy sciences to Ron Cummings. Ron and I were able to meet last December and have had valuable and fruitful discussions about our working relationship and the future of *WRR*. I believe that the search committee made a wise choice when they recommended that Dr. Van Allen invite him to succeed Jerry Cohon. I look forward to working with Ron and take this opportunity to welcome him formally as a colleague.

Readers of *WRR* may notice the changes in subject matter coverage with time. Many of these changes reflect national and international swings in research priorities as new awareness is given to particular problem areas. Some readers feel that the journal is too mathematical, others that not enough emphasis is given to fundamentals, and others feel that we should have greater coverage of applications. Our readers do not constitute a homogeneous group in their expectations of a journal's coverage. We strive, however, to provide a forum for all members of the profession.

Two issues have always been significant concerns of the editors of this journal. The first is that an author have no cause to hesitate to offer his work to the journal for consideration. The second is that the editor not decline an important

paper as the result of ignorance. All members of the editorial board work diligently to try to minimize unforgivable errors of this kind. The Hydrology Section officers, members of the editorial board, and all members of the publications staff and AGU continue to work to ensure that no established or prospective author perceive any barrier to his or her publishing work in *WRR*.

Our "Information for Contributors" invites "Original scientific contributions in physical sciences and social and policy sciences relating to water resources..." This work comes to *WRR* as reviews, papers, or technical notes. I know of instances where authors or prospective authors have interpreted this invitation too narrowly. Sometimes an author hesitates to send work because he or she feels that it may not be sufficiently mathematical. I believe that original work can be reported in one of many ways. Work that provides insights to problems, indicates directions where research activity needs to be focused, brings important knowledge from other fields that may improve our ability to approach water resources problems, or presents data, interpretations, and results from carefully conducted and reported experiments, satisfies our requirement for originality. Any appropriate reporting mechanism consistent with the journal's format should be used. A concise nonmathematical argument or discussion of fundamental processes or issues is always welcome.

Our reporting mechanisms have changed over the years and have some limitations. For example, when *WRR* was started, there was a "Letters" section which served a valuable function. With the advent of *Geophysical Research Letters* in 1974, "Letters" were replaced in all AGU journals with "Comments" and "Replies" to specific papers. Thus the potential richness of the journal was changed somewhat. The forum for "Views" or broad comments on needs of the profession that might have been considered in a "Letters" section of *WRR* now has its home in *Eos: Transactions of the American Geophysical Union*. The Hydrology section has a quarterly section in *Eos* entitled "Water Watch" which provides a suitable place for such subject matter.

The handling of Comments and Replies always poses a problem for any editor. Different authors have different feelings about how these should be handled. Some take the view that if someone makes a Comment, then he or she is fair game for anything the author chooses to place in a Reply. This does little to enhance public discussion of a paper, so I have attempted to have the writer of a Comment come to some reasonable degree of agreement with the author. Where disagreements remain, I have attempted to have both Comment and Reply revised to minimize confusion for our readers. In most instances, all parties have been cooperative and helpful, and I feel that our readers have benefitted. Suffice to say, however, that this approach is not appreciated by everyone.

The mechanics of our editorial process are substantially the same as described by Al Freeze in his informative article, "A former editor views the editorial process" (*Eos*, 62(38), 673-675, September 27, 1981), so I will not repeat them here. *WRR* is one of 10 archival journals published by the American Geophysical Union and is subject to broad editorial policy adopted for all of those journals. Unionwide there is a desire to

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Paper number 4W0240.  
0043-1397/84/004W-0240\$02.00

achieve fast review, and we support that policy. We take particular effort, however, to ensure that review comments obtained are both enlightened and enlightening. Reviews are sought from the most qualified individuals worldwide. We intend to keep doing this while attempting to satisfy reasonable time limits for obtaining comments; quality is given priority over speed. In short, the editorial board is committed to obtaining the most thorough reviews we can for each paper or set of papers. The cooperation from all reviewers and their commitment to maintaining the quality of *WRR* is appreciated by everyone associated with the journal.

In the last five years, two important changes have been made. The first of these resulted when Al Freeze and Jerry Cohon worked out procedures for publishing Review Papers in *WRR*. Review papers have become an important part of *WRR*. We recognize that preparation of a good review usually takes considerably more effort than a single research paper. Those efforts are, however, particularly important because of the utility of the papers to both newcomers to that field of enquiry as well as established workers. Our guidelines for review papers appeared most recently in the December 1983 issue of *WRR*. The second change was the result of activities by the Editorial Board, Hydrology Section executive, and AGU executive officers and staff to revise the page charge structure for *WRR*. We hope that the elimination of page charges on the first eight pages of each paper will remove any perceived fiscal barriers to publishing in *WRR*.

The involvement of the editorial board with the journal is and has been focused upon recruitment and evaluation of papers. There are many other issues of importance related to publishing *WRR*. The ready availability of text processing equipment suggests that the day is not far when it might be possible to send manuscripts in some type of active or stored electronic form directly to our copy editors, thence to the printers. This is still impractical, however, because of the many different fonts needed to produce a paper of the aesthetic quality published in *WRR*. Inclusion of figures complicates the problem further. While progress may seem unduly slow to the few who have text processing equipment the equivalent of a

commercial typesetter, AGU staff are engaged actively in ways to take advantage of improvements in the electronic processing of information. The printing industry is undergoing dramatic change, but that change will take some time before it influences significantly our mode of operation.

The ubiquitous personal computer and the resulting increased use of color graphics will probably increase the demand for reproduction of color photographs in journals in future years. Most color photographs in water resources have been associated with remote sensing applications. While color graphic reproduction in journals is still expensive, recent experience with four-color publication (see, e.g., *Journal of Geophysical Research*, 88 (A11), 1983) indicates that wider use of color in AGU publications may be desirable. Costs are now \$1500 for the first page for four-color reproduction and \$650 for each additional page. As with other AGU journals, if authors' interest is great enough, color in *WRR* could be provided at reduced rates. Depending on the original material supplied to AGU, color could be published at rates ranging from \$170 to \$580 per page.

When *WRR* was started, it was intended to be the journal of choice where members of the water resources community would publish their work. That intention is still my dominant objective. It is our hope that within the covers of this journal, active research workers and practicing water resources professionals will find the majority of the material that they need to remain current. Both Ron and I have our informal networks for trying to keep in contact with everyone who has an interest in *WRR*. If there is something that either of us has done or failed to do that you are concerned about or you feel that particular subject areas need different coverage, please let us know. While our names appear on the inside front cover, we are in fact the representatives of the profession who have been asked to nurture this journal. This is a mission we do not take lightly.

Stephen J. Burges