WATER RESOURCES AND FEDERAL RECLAMATION

We are honored to participate in this excellent and timely conference. The exceptional caliber of this program is the type we have come to expect of the League of Women Voters, and we in the Bureau of Reclamation particularly appreciate the fact that this audience represents the League's state-wide commitment of concern to these inseparable issues of land and water use. We commend you.

There can be no argument that never before in our history have land use planning and water policies relating to land use been of such great concern to such a large segment of our society.

And rightly so.

Your state -- which is mine, too, by the way -- has the potential for a quality of life that is equalled in but few other places in the world. Colorado's wealth involves a rare combination of people, natural resources, beauty, and climate.
This is a precious heritage, worthy of our very best efforts to protect and preserve.

And we must do that now. For now, clearly, is the time to assess and establish water and land use policies, before undesirable growth patterns become too firmly fixed.

The Bureau of Reclamation, as you know, has a deep and abiding interest in Colorado. In point of fact, about one Reclamation employee in every five makes his home in this state.

As Coloradoans, and as members of the League involved in water and land resource matters, you very likely are familiar with Reclamation's past accomplishments, but not necessarily so. I am surprised quite often to find on board planes as I travel throughout the west, that many people who depend on our works have never heard of us. So, I would like to relate the important numerical dimensions of the program and set the stage for a rapport on "where do we go from here."

In husbanding the water and land resources of the 17 Western States, the Bureau of Reclamation water resource management system:

* Delivers 27 million acre-feet of water annually, for a variety of uses.
* Provides water service annually to 16 million people, or 30 per cent of the total population of the 17 Western States.
* Provides 56 million visitor-days of public recreation use annually.
* Provides annual electrical energy generation of 50 billion kilowatt hours, and power revenues of $161 million, with powerplants whose the capacity is sufficient to serve the needs of 16 million people.
* Produces 53 million tons of food and fiber annually, at a gross crop value of more than $2 billion.
* And generates more than $4 billion annually in increased business
activities throughout the national economy, above what would have been generated in the absence of these projects.

Well, it is in this traditional fashion that Bureau of Reclamation activities and accomplishments have been summed up.

At past meetings such as this, I perhaps would have been tempted to talk at some length about these projects and their contributions to the west. (And make no mistake, these projects have contributed, and will continue to contribute mightily and beneficially to our land and people.)

But today there is a difference. Our society is continuously becoming more complex. The rate of change continues to accelerate. Qualitative satisfaction has become a trade-off for quantitative growth, pushed along by technologic advances and population growth, and conditioned by the transportation and communications revolution, and the general rise in affluence.

We have a new perspective, and we are addressing a new theme.

You are aware of it, I'm sure. Longtime Westerners are aware of it. So are those hundreds and thousands of others who only recently have staked their claims here in the west. And I can assure you that we in the Bureau of Reclamation are aware of it.

This theme is one to which we have only lately given names and expressions, like "quality of life," "balanced population growth," and "environmental ethic."

The theme demands that we consider, now, what our future shall be.
You know, when we look back to consider how dramatically our west has changed, even in the span of a single lifetime, we must recognize that those early pioneers and planners and builders were indeed visionaries.

But the eye and the mind of the visionary are no longer sufficient, because if we recognize the new theme I spoke of, then we must be aware, too, that much of what we have in Colorado and in the west falls far short of the probable visions of those early pioneers.

The prospect of a smog-bound, traffic-choked megalopolis, sprawling for miles along the Front Range corridor, can hardly be called visionary. Certainly it escaped me as I made try after try to drive my stripped-down Model T up Lookout Mountain in high gear.

The prospect of the resources of one region being stripped for the benefit of another, without due regard for the social and environmental consequences, can hardly be called visionary.

And the prospect of these resources being exploited in the decade of the 70's, under the provisions of legislation enacted nearly a century before, can hardly be called visionary. Don't misunderstand me. I don't mean to imply that all controlling legislation is far behind the times. Much is not. It is true, however, that legislation traditionally lags and therefore consistently plays a catch-up role. The first crusader for a social cause is like a voice in the wilderness. If the cause has merit, it gains support, and when that support becomes strong enough to influence the machinery of our great democracy, the legislative bodies, Federal or state, get into gear and start moving in response to the will of the people for the good of the people.
Sometimes we get impatient with the cumbersome process, but having become acquainted first hand with governmental functioning in many foreign countries, (Asia, Europe, South America, and Africa) I have yet to see a system I'd trade for ours.

Back to the topic of the day. If the shortcomings in meeting the dreams of the western visionary have taught us anything, they have taught us something about planning. And particularly about that phase of planning that involves water and land -- two of our most precious/renewable resources.

In the Bureau of Reclamation, we are planning now with the participation of the broadest possible constituency. Time and circumstances once dictated that water projects be conceived and developed with the assistance/primarily of local entities called "water user groups." Such groups are still of vital importance and continue to serve their communities and regions well and honorably.

But today we recognize that our horizons must be broadened. Each of us is a water user/in a variety of forms, and so should be . . . must be . . . directly involved in the earliest planning of projects that are designed to meet our future needs. That is why I earnestly encourage you not only to maintain your interest and involvement in water and land resource planning, but to enlist others in your efforts.

We are planning with an every-increasing concern for full environmental values . . . going beyond that required by law. Not as an isolated, mechanical step in the execution of a project, but as a conscious element that must be fully and honestly satisfied through every step in every project for which we in the Bureau of Reclamation have responsibility.
We are planning with full regard for a specific range of multiple objectives. This approach attempts to recognize changing public values in terms not of purposes, but of objectives. Heretofore, multi-purpose planning considered such items as flood control, municipal and industrial water, recreation, fish & wildlife enhancement, hydropower generation, and irrigation. Multiple objective planning encompasses these purposes but goes beyond them. We now require that each project be examined in terms of its impact on national economic development, environmental quality, and regional development.

We are planning on a broader geographic scale than ever before. Within our current value system, this involves the concept of basin-wide water management, in which the related structures and features of an entire basin are weighed so as to achieve the optimum use and development of the basin's water resources, and to assure that this use is compatible with future needs and objectives.

We are planning with greater emphasis than ever before for the improved management of existing facilities. We are seeking ways and means of increasing the efficiency of established projects. One such endeavor, for example, is the use of scientific sophisticated irrigation scheduling, which returns the two-fold benefits of water conservation and improved quality of downstream flows.

And, finally, we are more closely allied than ever before with state agencies in developing State Water Plans. Not the least of the concerns to which these plans address themselves is the question of how our water
resources can best be used to assure the economic viability of those small towns which are a key to population dispersal and contribute significantly to that illusive quality of life I mentioned earlier as well as environmental and regional development objectives.

Notwithstanding these commitments, one must recognize ... as you most certainly do ... that we are confronted by deeply troubling questions with respect to resource development.

The affluence that we enjoy in Western United States today ... an affluence that is due in no small measure to past development of water resources ... has given us the freedom to question the virtues of further development along traditional lines. There are many who believe that the time is at hand to break the spiral of water development, followed by economic growth, followed by more water development. Voters here in Denver rejected a bond issue last summer that some people viewed in just that light.

The basic question, and perhaps the crux of this conference, is what must our water policies be for us to achieve an optimum quality of life?

But who is to define "quality of life," and how is it to be measured?

And how can future development be shaped, or re-oriented, without jeopardizing our economic, social, and environmental well-being?

Seldom, if ever before, has a society been confronted by questions of resource use and preservation as difficult as these. Before we can propose meaningful answers, we must respond to a host of other questions less philosophic in character:
For example, to what extent and in what channels should our limited water supplies be used in the development of energy resources that we are told our nation must have?

What priority is to be assigned to irrigated agriculture, at a time when the nation's index of farm productivity has remained virtually constant since 1965? To what extent should we trade-off luxury crops for staples?

And perhaps most importantly, who should assume the leadership function in water planning, and in shaping the policies that will guide the development of our land resources and how should future development be financed?

Traditionally, as you may know, the cost of Federal programs for water development have been partially reimbursable (such as costs for flood control), partially reimbursable without interest (such as irrigation costs), and partially reimbursable with interest (such as commercial hydro-power and municipal and industrial water). In the future, should all costs be fully reimbursable with interest, and if so, at what interest rate? If the latter course were proper, how would we identify, obligate, and assess the diverse, widespread beneficiaries?

I would not presume to attempt to answer these questions. Having been associated with water and land development in the west for many years, I would be suspected of bias.

I do believe, however, that water and land resources can be developed to improve the quality of life. But, I hasten to add that acceptable development requires close and continuous cooperation between local, state, and Federal agencies, with citizen involvement an essential ingredient at every step of the way.
I believe, with others, that we are today on the threshold of a myriad of alternative futures. Options must be identified and analyzed.

I do not believe that the urgency of the times is such that we must choose now, immediately, which of those futures or options we must pursue.

Rather, there is time within reason, for deliberate assessment. Logical. Conscientious. Honest assessment.

There is time for us to think about, and to consider intelligently and objectively, the alternatives that are now open to us. We believe it is good that the League is concerned for the future and we are grateful for this opportunity to meet with you.
Now, if I may, I would like to introduce these gentlemen who will offer some specific comments about Bureau of Reclamation activities that I am sure will be of interest to you. The format they will follow will provide a 5-minute pause after each speaker, so that a few questions may be directed to his remarks. Then, at the conclusion of the panel presentation, we shall be happy to entertain all questions whether or not they are related to the panelists' remarks.

The first of these gentlemen is Wallace R. Christensen. Wally is a graduate of Utah State University, and has been in water resource planning for nearly 30 years. He is Chief of the Western U.S. Water Plan, and in that capacity has overall responsibility for an extensive study of Western water resources.

Next is Richard B. Eggen, an environmental specialist who is assigned to our Lower Missouri Regional Office with headquarters here in Denver. Dick is a graduate of Kansas State University, and was with the Kansas Forestry, Fish and Game Commission for 15 years before joining the Bureau of Reclamation in 1964.

The third panelist is John T. Maletic, who is in charge of the Land Resources Branch of our planning staff here in Denver. John is a soil scientist and a graduate of Penn State University. His career with the Bureau has been devoted to land use, and he is recognized world-wide for his contributions to the classification of soils for irrigated agriculture. Currently, he is involved in the Colorado River Water Quality Improvement Program, whose objective is to find a solution to the salinity problem of the Colorado River.
The fourth member of the panel is Dr. Archie M. Kahan, Chief of our Division of Atmospheric Water Resources Management. Archie is internationally recognized as an authority in meteorology and in precipitation management. He has degrees from the University of Denver, California Institute of Technology, and Texas A-and-M, where he was previously on the faculty.

I know you will find their comments interesting and provocative.

Thank you very much.
To: Commissioner

From: Director of Design and Construction

Subject: League of Women Voters Water and Land Use Seminar

The Chairman of the Water Committee of the Colorado League of Women Voters has advised me of a League-sponsored water and land use seminar to be held in Denver on Friday and Saturday, April 13-14.

The League intends this to be a major function. Governor John A. Love of Colorado, whose state is among the National leaders in developing and implementing land use legislation, will be the keynote speaker.

Mrs. Peggy Albers, the League's Water Committee Chairman, has extended to us a 2-hour time period (10 a.m. to 12 Noon) on Friday, April 13, for presentation and discussion of priority Reclamation activities. I intend to work with officials of the Lower Missouri Regional Office in making the best possible use of the time allocated to us.

I suggested to Mrs. Albers that you might be available to address the seminar with an assessment of the Bureau of Reclamation's role in the development and conservation of western water, particularly as that mission impinges on the increasing pressures to which our land resources are subjected. She was delighted with the suggestion. I promised to advise her promptly of your availability.

It is my thought that you might introduce the 2-hour Reclamation portion of the program with a 20-minute presentation. Following that, a panel of three Bureau representatives from the Lower Missouri Regional Office and the Engineering and Research Center would jointly provide a 45-minute program. Their discussion would concern (1) proposed Reclamation projects that affect the Denver and Front Range areas and Colorado generally, (2) planning and research efforts that concern the efficiency of water use, with a brief assessment of the Bureau's water quality and weather modification activities, and (3) an expression by the panel on the relation of water development to continued growth.
The seminar is to be held at the Airport Sheraton Inn, adjacent to Stapleton International Air Field.

I hope your schedule will permit you to accept this invitation.