negotiations and widespread public and private interest have spawned quite effective institutions concerned primarily with quantitative management of water. This process has been enhanced by the pervasive and high level of Federal interest. This regional process of institutional develoment is less well advanced in the southwest, and thus salinity control measures are more difficult to implement.

Without ignoring the many fine institutions that have developed or are emerging, particularly impressive institutions are those dealing with agricultural conservation, such as conservation districts. These have emerged from a long history of federal/state sponsored agricultural conservation activities and widespread direct involvement of participants. They are typified by programs reported for the Uintah Basin by Brown and Grand Valley by Hess. These institutions are strengthened by irrigation water users organizations which have similar long experience and heavy participation of constituents. Along these same lines, the effective response of conservation districts in Montana in implementing programs to mitigate saline seeps (Dodge et al.) is equally impressive.

56

Bring Me a Unicorn – Comments Concerning Water Policy

Jack A. Barnett
Executive Director
Colorado River Basin
Salinity Control Forum

I feel a little inadequate today to discuss water policies of other countries and this is an international conference. I note that this year, with the flood flows in the Colorado River, the United States has suddenly changed its mind and is delivering the required Colorado River flow to Mexico in amounts sufficient to cover the United States' commitment for the next 10 years during a 45 day period.

As I have been listening to the many excellent presentations, my ear has been tuned to the words "water policy." In the next few minutes I hope to give you some of my reactions and views on water policy or policies and to review some of the comments made by participants.

In many cases, it is impossible to separate water quality policies from water quantity policies and this is surely true with respect to salinity control. I heard Warren Fairchild say that the United States has a water policy whether we recognize it or not. It has evolved over many decades by actions of Congress, the courts, and the Administration.

Those who attempt to change water policy must truly be brave. Let me tell you the story of two prominent political leaders. One was named Juan and the other Jimmy. The first, many years ago, was a governor and was known for his early and significant discoveries. European legend had it that there was a marvelous and magical fountain someplace. The American Indians heard of this legend and, determining that they might capitalize on this myth, came to the governor and offered to sell him the land and the water where the alleged magical fountain was

located. They sold him what they said was the fountain referred to in the Garden of Eden and they also sold him the Isle of Bimini.

In 1531, Juan set sail to find the fountain he had purchased. It was never found. In the process he found Florida. He thought it was Bimini and he ultimately died from infection in wounds he received at the hands of the Indians as they found him an intruder in this land. Of course, the Juan I referred to was Juan Ponce de Leon.

Jimmy, on the other hand, was sold a bill of goods by a westerner right out of the Rockies. Her name was Kathy. Those around Jimmy were also receptive to the story she had to tell. She indicated that much could be done with respect to the water resources of this nation if there was a significant change in water policy. Soon Jimmy had organized 22 teams to study various aspects of the water policies of the nation. The damage inflicted to Jimmy because of his dealing in water resource policies may have been as great as the damage suffered by Ponce de Leon; Jimmy suffered mortal political wounds. Of course, the Jimmy I refer to is Jimmy Carter.

In the Colorado River we have water quality and water quantity policies. Generally we refer to them as the "Law of the River." However, if those of us in the room from the Colorado River drainage were to go our separate ways and write what the "Law of the River" is, I am sure we would determine that the water policies of the River were in what we perceived them to be in that no two written reports would come back the same.

We use the term "Law of the River" because often we are hesitant to clearly enunciate what we think the policies and laws are and so we like to hide behind the general term. In the Colorado River, the seven Basin states and the Federal Government have agreed to a water quality policy which calls for no increase in salt concentration as the Basin states continue to develop their compact apportioned water supply. Here we have water policy which has closely intertwined water quantity with water quality. As I go about trying to tell people what I perceive the policy and commitments to be on the Colorado River, many who are new on the scene are reluctant to accept what others would accept as firm commitments. They want to revisit and reanalyze the issues.

Well what did I hear others say around the conference with respect to water policy. First, I was surprised in the presentation by C.A. Macko, not to hear any reference to water policy. She described a very sound technical plan for the disposal of Glenwood-Dotsero Spring waters. She failed to mention that the plan was totally unacceptable to the water policies of the State of Colorado.

General Robinson indicated to us that there are long standing water policies that need to be complied with. They relate to the principles and standards and with cost benefit analysis. He then commented that he was surprised to learn that the Colorado River Basin states feel that neither of these established policy approaches are necessary or must be complied with. He felt we must have a policy of uniform cost sharing and uniform ways of describing water projects and identifying their worth.

I had to reflect that General Robinson and all of us know that even within the Reagan administration there is not agreement in this regard. This was shown recently by the public statements of Mr. Gianelli and Mr. Watt which were in conflict.

I found Myron Holburt's introductory comments with respect to policy or perceived policy changes of interest. In his judgement, Mr. Bob Olson, who had preceded him to the podium and was representing Commissioner Broadbent, spoke of policy with respect to funding of salinity programs from a very different point of view than he had expressed just weeks earlier. Mr. Olson had recently left the employment of the Western Area Power Authority where they were concerned with keeping the power rates down and he is now responsible for Bureau of Reclamation programs and would like to take advantage of funds which can be raised from increased power rates.

Recently I had a chance to visit with Governor Babbitt of Arizona. He indicated that he felt that approximately 85% of the water projects or developments in the western United States were completed and that the additional 15% he believes should be completed as envisioned. Most of these remaining projects, he asserted, are not only sound water projects, but also represent commitments made in the past. Those projects should be built to honor the previous commitments. I wondered when I heard him make that comment how newcomers in the water policy arena would feel about being committed to previous verbal promises.

Gene Reetz, although not officially talking policy for EPA, presented a provocative idea. Can we trade off, if you wish, salinity pollution in one place for salinity reduction in another place? He referred to this as the bubble theory which would allow the implementation of principles EPA has used in air quality matters into water quality matters.

I had a chance to visit with the Australians about the water policy in Australia and learned that they have strong state rights. However, they recognize the need for federal assistance in financing and are willing to enter into compacts or contractual arrangements which will give the federal government certain authority and voice in policy matters in exchange for needed federal financing.

After hearing all of this, I determined that sometimes water policies are set by state government, sometimes by the federal administration, sometimes by the Congress, sometimes by formal agreements or compacts, and sometimes by court actions.

Recently the courts have determined that Indians cannot go back and renegotiate their water rights as they had asked to do in the Pyramid Lake case. The courts recently also told us that states cannot establish policies or laws which prohibit the movement of pumped ground waters across state lines. At least Mr. Sporhase was allowed to accomplish his diversion.

Sometimes water policies are set by those who pay, sometimes they are set by public participation or by public preception and sentiment. I submit that often there are not broad, well-defined water policies that are universally accepted as being established and concurred in. Policies are dynamic. They are often changing. Policies would be described in different ways depending upon the point of view. Overall policies are made of many ever changing smaller water policies. The greatest jolt or change to a water policy system comes at the time of elections when newly elected officials review, and do not feel committed to, the policies of the previous elected officials.

And so I say, if you can bring me an animal that looks like a horse, has a white body, a red head, legs like an antelope, tail like a lion, blue eyes, and a single straight horn set with a spiral twist right in the middle of his forehead. A horn that is white at the base, black in the middle, and red at the top. If you can bring me such an animal, I will give you a water policy. Yes, if you can bring me a unicorn, I will give you a single set water policy.

57

Critique – Salinity Control Problems: Agricultural

Marvin E. Jensen
National Program Leader, Water Management/Salinity
Agricultural Research Service, USDA
Fort Collins, Colorado

INTRODUCTION

This symposium was an excellent short course on international salinity problems and the status of salinity control measures. Some control measures have been very successful, resulting in significant beneficial agricultural, municipal and industrial impacts. Descriptions of disastrous salinity situations that have developed over the past few decades should provide insight and guidance to decision-makers to help avoid similar emerging problems.

The commonality apparent in many of the papers involves problems of salinity control policy, upstream versus downstream water users, slowness of response in the public sector to emerging problems, and competing water uses. A concept presented later in this critique may lead to more rational resolution of upstream/downstream problems and minimize conflicting uses of river systems.

SUMMARY

Many excellent papers were presented at this symposium. The papers from Australia were especially informative and they described effective salinity control measures and policies that differ significantly in certain respects from those in the USA. The papers presented at this symposium provide an excellent data set for those involved in salinity control programs and projects. The metric units used were reasonably consistent, but since the papers were not edited a summary table is provided to enable conversion of some frequently used units to a common set of SI units.