low as possible, while insuring that the rights of all Americans are protected.

I invite public comment on the ideas presented in my testimony and regarding our proposed legislation.

WORLD FOOD DAY

HON. BENJAMIN A. GILMAN

OF NEW YORK

IN THE HOUSE OF REPRESENTATIVES

Friday, June 30, 1995

Mr. GILMAN. Mr. Speaker, for 11 years the U.S. National Committee for World Food Day has offered a teleconference on critical food policy issues to colleges and universities in the United States and through the facilities of the U.S. Information Agency WorldNet service to embassies and institutions throughout the Western Hemisphere. In 1993 and again in 1994, WorldNet also made it possible for the telecast to be received in Africa and Asia.

The World Food Day program dealt with the increasing use of water and the decreasing quality of the supply in nearly all world regions. Abundance is giving way to public policy decisions on resource allotment and cost sharing. There is an urgent need for the international community, national governments and citizen organizations to make decisions relating to the competing uses of the environment, agriculture and human consumption needs.

I want to thank the U.S. National Committee for World Food Day and the Committee's national coordinator, Ms. Patricia Young, for their efforts in bringing this important subject to public attention and in helping prepare for the international conference. I want to thank the U.S. Agency for International Development for their support and technical assistance in the organization of the World Food Day Teleconference. I also want to praise USIA WorldNet for a job well done in carrying the program throughout Latin America and the Caribbean and to additional sites in the rest of the world.

Mr. Speaker, I urge my colleagues to read the exclusive summary of the World Food Day Teleconference, and I wish to insert it in the RECORD at this point.

1994 TELECONFERENCE EXECUTIVE SUMMARY

The eleventh annual World Food Day Teleconference was broadcast from the studios of George Washington University Television in Washington, DC on October 14, 1994. It linked a distinguished international panel of experts on food, water and agriculture to more than 1,000 receive sites in the United States and the Western Hemisphere. There were also a number of passive sites in Asia and Africa. The theme for the teleconference was ''Sharing Water: Farms, Cities and Ecosystems.''

After years of growth since the World Food Day teleconference series began in 1984, the program is believed to be the largest, single development education broadcast ever organized in the U.S. The Spanish-language broadcast, involving simultaneous interpretation from English, began in 1990 with a pilot project in Mexico through the cooperation of the Instituto Tecnológico de Monterrey, which relayed the broadcast in Spanish to its 26 national campuses. Outreach to the rest of Latin America and the Caribbean was initiated in 1992 with the support of the UN Food and Agriculture Organization and the U.S. Information Agency WorldNet system.

World Food Day, held for the first time in 1981 and marking the anniversary of the founding of FAO in 1945, has captured the imagination of people throughout the world. In the U.S. the day is observed in virtually every community in the country, with especially strong support in schools, worship centers and food banks. The U.S. National Committee for World Food Day has grown in membership to more than 450 private voluntary organizations and works directly at the grassroots through more than 20,000 community organizers.

Serving on the teleconference expert panel in 1993 were José Felix Alfaro, international consultant on water resource planning, Sandra Postel, director of the Global Water Policy Project in Cambridge, Massachusetts, Rita Schmidt Sudman, executive director of the Water Education Foundation in Sacramento, California and Hans W. Wolter, chief of the Water Resources Development and Management Service of the UN Food and Agriculture Organization. The moderator was Alex Chadwick of National Public Radio.

THE TELECONFERENCE CONCEPT

In the U.S. the World Food Day teleconference has become a model for development education on global issues, in part because of the enormous growth in interactive site participation and the additional millions of viewers accessed through collaborating networks and in part because of the year-around use of the program's study materials and the teleconference videotape itself in college-level courses in a great variety of disciplines. The ''internationalization'' of the program since 1990 has further increased its impact and was broadly welcomed by participating colleges and universities in the U.S. The main components of the teleconference package are: (1) a Study/Action Packet of print materials prepared by the non-governmental U.S. National Committee for World Food Day and distributed to all participating schools and other study centers (and distributed in Spanish to the participating sites in Latin America); (2) the three-hour satellite telecast on World Food Day composed of three hour-long segments for expert panel presentations, site consideration of the issues and a site-panel question and answer interchange; (3) publication of the teleconference report including written responses by panelists to questions that were not taken up on the air for reasons of time; and (4) analysis by selected site organizers after each year's program to make recommendations for the year to follow. All of the main teleconference components are designed as college-level curricular aids.

THE STUDY/ACTION PACKET

The Study/Action Packet is designed as an integral part of the teleconference package, but also serves as a separate study resource for groups planning World Food Day observances but not participating in the telecast. More than 1,500 copies of the packet were distributed on request in the months prior to the broadcasts to colleges, other institutions, community study groups, schools and individuals. All or part of the packet materials were reproduced by many of the participating sites.

Again in 1994 the Study/Action Packet was translated into Spanish and reprinted by the FAO Regional Office for Latin America and the Caribbean and distributed throughout the region by the network of FAO country representatives. Copies of the English version were also distributed to U.S. embassies on request.

The 1994 packet was developed by the U.S. National Committee for World Food Day with the cooperation of several institutions and organizations which contributed material from their own research and analysis. The teleconference theme, exploring the growing scarcity of water and conflicts over the division of available supply among agriculture, industry, urban needs and the environment, was discussed by panelists in a global context, but with special emphasis on problems and needs of North and South America. Water issues facing the western part of the United States were featured, and for the fourth year one of the invited international panelists came from Latin America.

This Study/Action Packet is not intended to be a comprehensive analysis of global water issues but as an overview and introduction to the theme, special viewpoint papers included in the packet and donated by their authors came from Sandra Postel, author of the book ''The Last Oasis,'' B. Delworth Gardner and Ray G. Huffaker from Brigham Young University in Utah and the University of Tennessee, Matias Preto-Celi of the FAO Regional Office for Latin America an Professor Nnamdi Anosike of Rust College in Mississippi. Also included was a special interview on western water issues with Secretary of the Interior Bruce Babbitt.

The packet also included a special 24-page Manual for Community Action on Water Policies and Programs. This was the eleventh study/action packet prepared in conjunction with the teleconference series and the fifth to be undertaken directly by the U.S. National Committee for World Food Day. Previous packets were prepared by the Center for Advanced International Studies at Michigan State University and by the Office of International Agriculture at the University of Illinois. Funding for the 1993 packet was partially provided by the Agency for International Development. General funding for the teleconference program was provided by the U.S. National Committee for World Food Day, FAO and Covenant Presbyterian Church of Scranton PA.

TELECONFERENCE OUTREACH

The WFD teleconference has grown each year since it was begun in 1984. Teleconference impact continued to grow in 1994 in at least three other ways. For the ninth year the program was used by professional organizations for continuing education credits. These credits (or professional development units) were offered again in 1994 by the American Dietetic Association, the American Home Economics Association and through the Catholic University of America to clergy and social service professionals. Beginning in 1989 there has been a steady rise in teleconference participation by high school students, initiated by both individual schools and school systems. The audience of home television sets accessed by cooperating networks is believed to be in the millions, reached through the Catholic Telecommunications Network of America, AgSat, Vision Interfaith Satellite Network, PBS Adult Learning Satellite Service and individual PBS and cable stations.

THE TELECONFERENCE BROADCAST SUMMARY

The telecast opened with questions from the moderator to each member of the panel in the area of their special interest or expertise. Dr. Alfaro was asked to judge the gravity of water problems in Latin America. He replied that water concerns are very widespread in the region in large part owing to the rapid human migration from rural areas into cities and the consequent overwhelming of water services and infrastructure. Professor Postel was asked her views on problems of irrigation. She pointed out that while only 16% of world cropland is irrigated this land produces more than a third of all the world's food. Since population continues to rise very quickly, she said, it is a cause of major concern that the amount of irrigated land per capita has been slowly declining for

the past decade. She also noted that much of current irrigation is unsustainable over the long term because it is coming from pumping groundwater (water from wells rather than river diversion) faster than it is being replenished by nature.

The moderator then noted that the state of California has a special relevance in a discussion of water use because of its enormous agricultural production in a semi-arid climate through very large water diversion projects. Rita Sudman noted that state's past achievements but said that a new situation is evolving in which agriculture is under pressure to relinquish part of its water supply in order to meet needs of urban areas and the natural environment. California, she added, could in a sense be a laboratory for much of the world in its search for solutions to water sharing. Dr. Wolter was asked, as an official of the UN Food and Agriculture Organization, if water problems could slow the growth in food production globally. He replied that there exists very serious water problems regionally, and noted that about 230 million people live in countries with acute water shortage. However, he added, water problems in most regions can be solved by new supplies and/or improved management.

The panel as a whole then took up the question of whether water should be considered as a ''good'' in the economic sense, with a unit market value. Dr. Wolter began the discussion by noting that a) water is an economic commodity in the sense that it serves production purposes, but that it also has social and even cultural characteristics that make it difficult to treat only as an economic good; and b) that there are further characteristics of water that make it different from other resources—that it is extremely bulky, difficult to store and transport and, in the private sector, difficult to establish property rights to it.

Prof. Postal said there is not doubt that water is undervalued as a resource because it has always seemed plentiful and that market allocation in some ways can bring efficiencies in water use. However, she noted, the market cannot meet all the social needs for water and, in particular, intervention in the market by governments will be required to protect the natural environment.

Furthering this point, using California as an example, Ms. Sudman noted a) that while people like to say that water is free it really isn't because in one way or another the public pays the cost of infrastructure, distribution and purity maintenance; and b) that the simple ability of cities to pay for water does not answer the problems of rural communities. The need now, she said, is to work out systems of sharing and balance, but that this is not always easy or the solutions clear.

Dr. Alfaro noted that water marketing can be useful up to a point, but that there would be very real political and equity problems in a pure market system. In Latin America, he noted, there are millions of small, subsistence farmers who do not have the means to pay for the water they need for their crops. Ms. Postel added that if water prices are disconnected from crop prices this adds another destabilizing factor to agriculture. However, she added, the high cost of pumping water in areas of the U.S.—where water rights are not a central issue—has brought about great improvements in efficiency.

Dr. Wolter noted that before markets can play a normal role there has to be an allocation of water rights, and that this does not exist in most countries where there is no clear ownership and very few statistics on resource availability and use. FAO, he added, is helping these countries to reform their policies and institutions. Ms. Sudman noted that there is a further complication because farmers can sell rights to surface water and then meet their own needs by increased pumping of groundwater which is not a solution over the long term. Rights to groundwater, she added are much less well established by law. Dr. Alfaro noted that the point of irrigation is to increase production, but that more is required than water and that poor farmers are not able to take part in the productivity gains. There is, therefore, the danger, he said, that water will be one more production factor going to rich farmers but not to poor. Dr. Wolter noted that this does not have to be the case, that in Bangladesh, for example, the introduction of small and cheap pumps to tap groundwater, which is plentiful there, has led to competitive water marketing that is serving the very small holders.

The moderator then asked the panel to consider future problems of water quantity and quality to meet human needs.

Ms. Postel said her statistics and projections point to a worsening situation in much of the world. She noted that 27 countries already live with severe water shortages, but that this number could jump to 40 countries in the coming years and this will mean more competition for water and then for food. Dr. Wolter noted that most of the countries in water scarcity exist around the Mediterranean Sea and that generalizations may not be valid elsewhere. Africa, for example, has a vast amount of unutilized water capacity and there could be a period of intensive investment in water diversion and dam construction ahead. Efficiency will be very important, he said, but all options of supply and management need to be considered.

On the issue of water quality in food production, Dr. Alfaro said that quantity and quality are part of the same problem. Nearly 30% of all irrigated cropland is now affected by waterlogging or salinization, he said. In part the solutions to this are technical, such as better drainage, but in part they can be cultural, for example where people go on raising rice in very light soil more suitable to other crops. Cultural, political and even religious regimes can complicate introduction of technical solutions, he said.

The panel then took up the situation of water for urban systems and drinking water. Prof. Postel noted that only about 8% of all water used is for cities, but that this 8% is difficult to supply, store, treat for contaminants and distribute. It is also difficult and expensive to collect and treat waste water before it is returned to the environment. With populations growing and big cities growing even faster, she said, all these problems are multiplying. And, she noted, according to UN estimates there still are more than a billion people who don't have access to safe drinking water.

Dr. Wolter noted that the International Decade on Safe Drinking Water and Sanitation has yielded some interesting results. Conditions in rural areas have improved very rapidly, but not the situation in the cities where infrastructures have not kept pace. Planners and governments need to take a more integrated approach and be more aware of the ramifications of water intervention both upstream and downstream. However, he added, these are policies of governments and the UN agencies can only offer advice when asked.

The moderator then asked the panel to consider which sectors of the population might be most affected by new water policies. Ms. Sudman noted that in California there is no doubt that agriculture will be the sector most affected since the farmers have control of about 80% of all water taken for human use. The great water projects were built in the 1930s and 1940s primarily to improve agriculture, and the farmers signed contracts for 40 years of water supply. Now that these contracts are running out, society's values have changed and people are saying we need to give less to farmers and more to protect fish and birds. About 12% of formerly agricultural water is now being diverted back into rivers and streams to protect the environment. That has hurt farmers, she said. But most people think it is the right thing to do.

Prof. Postel described the need for a ''water ethic.'' In the past, she said, we simply projected demand and tried to ensure that the supply could be there for human purposes. A ''water ethic'' implies a recognition of water ecosystems which are vital in themselves as well as to human needs and would be protected as a first priority. Ms. Sudman added that while this is what California is now trying to accomplish there is a gap in knowledge of exactly how much water is needed to achieve each purpose. If the goal is to double the fish population, can that be done by just adding more water to stream flow and how much more? We don't yet know, she said.

Dr. Alfaro, speaking as a devil's advocate, noted that the U.S. is a very rich country, but that such care of the environment may not be a logical priority of a poor society. There, he said, where there are no food stamps, the top priority for the poor is food to eat. Prof. Postel said that countries could not wait for environmental protection until poverty problems are solved and a certain level of development achieved because unchecked destruction of the environmental systems lead to the loss of resources on which jobs for people depend. Dr. Walter suggested that there are, in fact, conflicts between development and environmental protection and answers will be complicated. Different countries face different problems and difficult choices, he said, and we can't impose our values on them from the outside.

At the close of the first hour, the moderator asked Prof. Postel whether the world would have ample water resources if they are managed sustainably. She replied that a part of the problem today is that an important share of our food production and water use is not sustainable over the long term. For example, groundwater is being pumped out far faster than it is replenished by nature. First, as water becomes scarce it grows more expensive to pump so food becomes more expensive too, and second, the reduced supply in the ground will become salty. At this point in time, she said, we need to be much more concerned with managing our water demand rather than increasing our supply—learning to do more with less.

THIRD HOUR QUESTIONS AND ANSWERS

As in previous years, the third hour of the teleconference program was devoted to questions directed to the panelists by the participating sites. All questions received were answered either on the air during the third hour segment or by the panel members in writing afterward. These written answers are part of the teleconference report. Questions were received from Canada, the U.S., Latin America and the Caribbean. Subjects in which there tends to be the greatest interest among the participating sites included: how water marketing might affect poor farmers and poor countries; what kind of system could be devised that would adequately maintain the natural environment and still leave water for human needs; how is sustainable water used possible if population continues to increase; what kind of incentives are there to encourage efficiency in water use; what are the trade-offs in poor countries between environmental protection and industrialization and is it possible to avoid the conflict; and, who should manage water markets, governments or private institutions.

Panel responses to all these questions varied, sometimes fundamentally, but there was general agreement on three points: (1) that governments and the international support community now recognize the seriousness of water problems; (2) that answers are necessarily complex both because of the nature of the resource and the conflicting user demands; and (3) that there is still time for most countries and regions to adjust and modernize their water policies before a crisis occurs, but that action is necessary.

BRING TELEMEDICINE TECHNOLOGY TO THE AMERICAN PEOPLE

HON. RON WYDEN

OF OREGON

IN THE HOUSE OF REPRESENTATIVES

Friday, June 30, 1995

Mr. WYDEN. Mr. Speaker, the House will consider H.R. 1555, the Communications Act of 1995 after the Fourth of July district work period.

If done properly, telecommunications legislation will open the doors to radical advances in technology for our constituents. In reshaping America's telecommunications laws, the Congress must consider as many potential applications of telecommunications technology as possible. After all, it's been 60 years since the last rewrite to telecommunications law.

During Commerce Committee consideration of H.R. 1555, the Communications Act of 1995, I raised the issue of telemedicine in an effort to expand the use and development of this exciting health care technology. Telemedicine is a diverse collection of technologies and clinical applications. The defining aspect of telemedicine is the use of electronic signals to transfer information from one site to another. Telemedicine's potential is immense; including for rural care, emergency care, home care, medical data management, and medical education.

I offered and withdrew an amendment to allow licensed physicians in one State to conduct consultations with licensed health care practitioners in another State. I withdrew the amendment at the request of Members who sought additional time to explore the issue with the objective of crafting a bipartisan floor amendment.

Bipartisan discussions continue today. It remains my objective, working with colleagues from both sides of the aisle, to produce bipartisan legislation to bring telemedicine's many benefits across State lines to the American public.

I call the attention of my colleagues to the report printed below titled, "Telemedicine and State Licensure." The report outlines current problems facing telemedicine and the need for a bipartisan solution.

H.R. 1555, the Communications Act of 1995 is our opportunity to free telemedicine from the regulatory morass which threatens to keep this technology from the American people.

THE AMERICAN TELEMEDICINE ASSOCIATION—TELEMEDICINE AND STATE LICENSURE

INTRODUCTION

The primary purpose of telemedicine is to give all citizens immediate access to the appropriate level of medical care as disease or trauma requires. Currently, each state must license each physician or dentist who desires to practice medicine within its borders. This mode of licensure, while appropriate for practices limited by state boundaries, unduly constricts the practice of telemedicine. As a result, medical services today stops at state boundaries. American consumers are blocked from accessing medical care available in other states absent their ability to travel away from their own homes and communities.

The challenge facing all concerned with advancing medicine, and the sincere intent of our effort, is to preserve the credentializing and monitoring efforts of each state while providing instant and immediate access to appropriate levels of care where not otherwise available.

THE CURRENT STATE OF PHYSICIAN LICENSURE IN THE UNITED STATES

In some states, there are limited exceptions to the rule that a physician or dentist must possess a license in each state to which he practices medicine. Statutory ''consultation exceptions'' allow an out-of-state physician or dentist to enter a state to see a patient at the behest (and in the presence) of a locally licensed physician or dentist. However, consultations are often required to be limited in duration, and a number of states which possess them are acting to close them for telemedicine practitioners. In 1995, Colorado, South Dakota, and Texas have considered amendments to their consultation statutes prohibiting out-of-state telemedicine practitioners from ''entering'' without being licensed in their state. Utah repealed its consultation exception effective in 1993, and the Kansas Board of Healing Arts passed a regulation (which conflicts with its statutory consultation exception) which requires out-of-state telemedicine practitioners to be licensed in Kansas.

Additionally, a number of states prohibit out-of-state consultants from establishing regularly used hospital connections. If consultants cannot use telemedical facilities at out-of-state hospitals, this limits the availability of specialized healthcare to underserved areas. The ''consultation exceptions'' are simply not useful or dependable for the future of telemedicine. They are easily amended to exclude telemedicine practitioners, they require the presence of a locally licensed physician (which may not always be possible), and only one-half of the states possess exceptions broad enough to be used by telemedicine consultants.

While some have argued that the distant patient is ''transported'' to the physician or dentist via telecommunications, this is a weak legal argument unlikely to stand up in trial. It is instead probable that a majority of state courts would find that a telemedicine practitioner is practicing medicine in the patient's state. If the telemedicine practitioner is not licensed in the patient's state, this would have an extremely negative impact upon the physician's malpractice liability, malpractice insurance coverage, exposure to criminal prosecution, and potential loss of licensure in his home state as well as remedial legal recourse for an injured patient.

Licensure by reciprocity and licensure by endorsement have long served physicians or dentists who wished to be licensed in two or three states. However, reciprocity and endorsement fall short of the needs of physicians or dentists practicing via a telecommunications network. Today, reciprocity is rarely used, and licensure by endorsement still requires that applications, personal interviews, fees, pictures, school and hospital records, and even letters from locally licensed physicians or dentists be submitted to each state where a license is desired. Each state's requirements are minutely different, and the expense and time involved in receiving licensure by endorsement in more than one or two states makes it prohibitive, if not impossible, to achieve.

IS INDIVIDUAL STATE LICENSURE REQUIRED?

The Tenth Amendment of the U.S.Constitution reserves to the states the power to protect the health and safety of state citizens, hence the ability of the states to regulate and license healthcare providers. Almost every state statutorily defines the practice of medicine, and a typical statute reads:

''The practice of medicine means . . . to diagnose, treat, correct, advise or prescribe for any human disease, ailment, injury, infirmity, deformity, pain or other condition, physical or mental, real or imaginary, by any means or instrumentality.''

It appears that despite the presence of a primary/referring physician, the physician consulting via telemedicine who attempts to diagnose the patient is practicing medicine where the patient is located. The phrase ''by any means or instrumentality,'' while not common to all states, frequently appears in state definitions. Courts would determine that telemedicine was the ''instrumentality'' used to reach a diagnosis, and find that the state definitions bring telemedicine consultants under their jurisdiction. States guard their power to regulate for health and safety purposes, and the U.S. Supreme Court has upheld their ability to do so.[2] Therefore, it is unlikely that state courts would surrender jurisdiction over an out-of-state physician or dentist who practiced medicine via telecommunications on a patient located in their state. Courts will find that the medicine was being practiced where the patient was located, and therefore the physician or dentist should have been licensed in the patient's state. Such a finding would have a chilling effect on telemedicine, since licensure cannot be obtained in every state by every specialist who participates in even one consultation.

The means for attaining these goals are to have the patient under the care of a physician licensed in the same state of residence but allowing consultative evaluations of the patient by specialists licensed in another state. Other health care professionals, such as physician assistants, must be under the supervision of a licensed physician.

IS INTERSTATE TRANSMISSION OF TELEMEDICINE REQUIRED?

Just as the technology for the transmission of sound and images has witnessed revolutionary change, so too has medicine. These advances in telecommunications and medicine have made advanced medical care available where not thought possible before. Today, there are compelling needs to use interstate transmission of telemedicine from medical, social welfare, and economic perspectives:

The unpredictable immediacy of eruptions of disease or trauma may command the services of unpredictable types of specialists requiring licensure reciprocity in all 50 states. Epidemic outbreak of disease is not limited to state boundaries. The interstate mobility of specialty expertise is needed throughout the United States to meet the demands for combating injury or illness wherever and whenever it may occur.

Medicine has witnessed the emergence of super-specialized medical care centers in numerous critical areas. These centers are located in regional tertiary care facilities serving multi-state areas. Receiving medical attention through these centers currently requires the transport of most referred patients out of state. In addition, the lack of proper recuperative care in their home community after a patient returns home has prohibited the patient from returning home sooner. The development of telemedical