



Protecting and enhancing
Western irrigated agriculture

A View from Ground Zero:

**Assessing the Real State of Western Irrigated Agriculture
and Recommended Research Topics that Will Help
Family Farmers and Ranchers**

A White Paper Prepared by the Family Farm Alliance

**Presented to
The National Agricultural Research, Extension, Education, and Economics
Advisory Board
Water Subcommittee**

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The Family Farm Alliance is pleased to participate in the National Agricultural Research, Extension, Education, and Economics Advisory Board (Board) Water Subcommittee session to explore issues related to water quantity, quality and the environment factors related to them. The Alliance is a grassroots organization of family farmers, ranchers, irrigation districts and allied industries in 16 Western states. The Alliance is focused on one mission: To ensure the availability of reliable, affordable irrigation water supplies to Western farmers and ranchers. We are also committed to the fundamental proposition that Western irrigated agriculture must be preserved and protected for a host of economic, sociological, environmental and national security reasons – many of which are often overlooked in the context of other policy decisions.

Advisory Board Background

The National Agricultural Research, Extension, Education, and Economics Advisory Board (Board) provides advice to the Secretary of Agriculture and land-grant colleges and universities on top priorities and policies for food and agricultural research, education, extension and economics. The Board is made up of 31 members, each of which represents a specific category of U.S. agricultural stakeholders, as mandated by Congress. The Board's main objective is to contribute to effective federal agricultural research, education and education programs through broad stakeholder feedback and sound science in its ongoing role as advisor to the Secretary of Agriculture. The Advisory Board also, by mandate, consults with appropriate agricultural committees of Congress.

Water Quantity & Quality: Research, Extension, Education & Economics Needs

The Advisory Board's Water Subcommittee will meet in October 2006 to explore issues related to water quantity, quality and the environment factors related to them, with the goal of developing recommendations that need research, extension, education and economics work. It will explore supply and demand related to water resources to include the challenges of competition between urban and rural users of water; water quality and issues related thereto which are especially relevant for agriculture and rural communities; and the relationship between environmental issues and water quantity and quality.

The goal will be to look at water as a system and identify points where additional research, education or policy incentives may be needed. The presentations and discussion will help the Advisory Board identify some high priority focal points for additional research to clarify problems not well understood. The Advisory Board will then discuss possible recommendations that will form the basis for its report to the Secretary and Congress on this topic.

Initial Observations on Priority Focal Points

It appears that the Advisory Board has already identified some high priority focal points for additional research, as evidenced by the meeting agenda and introductory materials that have been prepared. Specifically, it has been suggested that extension programming is needed to educate farmers, business people and rural and urban citizens about “how to protect water quality and resources”. Education programs have been proposed that may support “improved water quality and help preserve water resources”. A final high priority focal point is for economic research on policy instruments to achieve “improved water quality” and to “preserve and efficiently allocate available water resources”. Other potential areas of investigation include finding ways to “improve water use efficiency in agriculture”, “reduce potential pollution from agriculture”, and “adapt crops to grow well with less water”.

Overall, this proposal appears to be well-intentioned. However, we fear it is misguided. It virtually ignores the negative implications of reallocating more agricultural water supplies to meet new urban and environmental water demands. At what point will too much agricultural land be taken out of production? Do we want to rely on imported food for safety and security? The Europeans, who have starved within memory, understand the importance of preserving their food production capability. They recognize it for the national security issue that it is. If the Advisory Board wants to do something truly meaningful, they too, should look at the bigger picture.

Family Farms in Crisis

Family farms and ranches are experiencing a crisis in numbers. In the 1930s, there were close to seven million farms in the United States. Today, just over two million farms remain. Of the remaining farms, roughly 565,000 are family operations, farming just over 415 million acres or 44 percent of total farmland. And 330 farm operators leave their land every week.

One of the most troubling aspects of the on-going farm crisis is the decline in the number of young farmers entering the field. More than half of today's farmers are between the ages of 45 and 64, and only six percent of our farmers are younger than 35¹. Both statistically and anecdotally, for the first time in many generations we see sons and daughters of farmers opting to leave the family farm because of uncertainty about agriculture as a career.

¹ Source: www.farmaid.org

Scary Times for Western Irrigators

Urbanization and competition for water supplies are driving Western farmers off the land at a time when American food production in general is following other industries “off-shore” in search of lower costs. Traditional farms and ranches are disappearing, and this year our country will actually become a net importer of food, drawing frightening parallels to our dependence on foreign sources of energy.

Meanwhile, according to USDA's Economic Research Service statistics for 2005, Americans are spending, on average, 9.9 percent of their disposable income on food. To put this into perspective, just 70 years ago, the figure was more than 25 percent. So, while more, better and safer food is being produced by our farmers, they continue to feel the pinch – and it is only a matter of time before that pinch translates itself back into the supermarket.

Ironically, it is because Western irrigated agriculture has been so adaptive and successful at providing plentiful, safe and affordable food that it is now jeopardized – nobody believes there can be a problem. The last Americans to experience food shortages are members of the so-called Greatest Generation and their parents. For the most part, they have left us, taking with them the memories of empty supermarket shelves. When the issue has never been personalized, it's easy to be complacent.

Agriculture: The Reservoir of the Modern West

We have heard many anecdotal accounts from Western farmers and ranchers of important agricultural lands being converted to residential and commercial development and of agricultural water being used (transferred or bought) to support these new demands. New environmental water demands imposed by regulatory agencies or courts also first look to agriculture. This is happening in every state, but farmers and ranchers point to some striking examples:

- A report released in April by Environment Colorado found that, from 1987-2002, Colorado lost an average of 460 acres per day of ag land. The report predicts 3.1 million more acres will be lost to development by 2022.
- Arizona's Salt River Project (SRP) is the “poster child” for transfers of agricultural water to urban areas. In a few years, the SRP will cease to provide water to agriculture in order to meet new demands exerted by development.
- In Las Vegas, Nevada, over 70,000 new residents are moving in every year, and Southern Nevada Water Authority is looking to rural areas to satisfy its growing thirst.

- California remains the most populous state in the nation, with over 36 million people calling it home, and more arriving every year.

We cannot continue long-term hypothetical processes that focus primarily on continued conservation and downsizing of Western agriculture. The U.S. needs a stable domestic food supply, just as it needs a stable energy supply. The post 9/11 world of terrorist threats makes the stability of domestic food supply even more pressing.

Outgoing Secretary of Health and Human Services Tommy Thompson put it bluntly when he said, “I cannot understand why the terrorists have not attacked our food supply, because it is so easy to do.” Further, Thompson said he worries “every single night” about threats to the American food supply.

For farmers to survive; for food to be produced in America; a stable water supply must be available. In many areas of the West, water resources are available and waiting to be developed. However, the policies of the federal government make development of that water nearly impossible. Water wars are being fought throughout the West simply because we have not had the vision to develop new, environmentally sound, sources of water.

The federal government must adopt a policy of supporting new projects to enhance water supplies while encouraging state and local interests to take the lead in the implementation of those projects. While this may admittedly be beyond the scope of the Advisory Board’s purview at this time, the Family Farm Alliance will continue to advocate and take action towards this end in other forums.

Suggested Priority Research Topics

The Advisory Board should focus on trying to answer the questions farmers and ranchers keep posing: Is irrigated agriculture a national security interest we want to protect? If yes, then how do we protect that interest while addressing water quality, environmental and sustainability issues? Overall, it would seem that the focus should be on the policy and how to implement it. With that said, there are four, narrower but related issues that we believe Western irrigators would like to see addressed.

1. Assess the collective impacts of agricultural land and water changes in western states over the last 10 years, as well as predicted trends. A study of this sort may provide the type of hard findings – as opposed to anecdotal evidence - that may help wake up policy makers on the “big picture” ramifications of this issue.
2. Investigate and Improve Federal Management of Watersheds. In most Western states, much of the water used derives from snowmelt in mountainous areas. As noted below, we are hearing more frequent reports from state and local governments and water users who question how the federal government –

particularly the U.S. Forest Service - is managing the watersheds. Also, the USFS is a strong presence when it comes to planning on future water storage and policy.

Currently, the National Academy of Sciences is conducting a study of impacts of forest management to water yield. The Advisory Board may want to track this effort, and look for ways of furthering research needs identified there. Another topic to investigate may be the perceived negative impact that federal roadless rules have on the ability to properly manage watersheds.

3. Develop a survey of Western residents regarding the importance of irrigated agriculture. This study would have the following objectives: 1) To determine the public's attitudes towards such issues as food prices, food safety, pesticide use, environmental practices, wildlife and agriculture, animal welfare, land use, population growth and agricultural land preservation, among others; 2) To explore differences in perceptions among Westerners that may be based on geographic location, length of residence, or other characteristics; and 3) Compare current attitudes towards the above mentioned issues with past surveys (if applicable).

A similar survey earlier this year was released by Colorado State University², and the results were remarkable for the strong support average citizens give agriculture in that state. For example, agriculture was seen as the most important economic sector in Colorado, beating out tourism & recreation, high tech industries, and mining and petroleum. Nearly all respondents (96.8%) felt that maintaining agricultural land and water in agricultural production was "very" or "moderately" important. And, notably, nearly 3 of 4 respondents indicated that agriculture should be the top priority for water allocation in dry years, as compared to 1 in 5 respondents who said in-stream flow levels should be top priority. Rafting and fishing were seen as low priorities.

Many Western irrigators believe the Colorado findings are indicative of how other Westerners view irrigated agriculture. If a West-wide survey were conducted, those findings could be used in tandem with the cumulative impacts study (above) to encourage positive political action to protect and enhance Western irrigated agriculture.

4. Provide an independent assessment of permitting conditions placed by USDA agencies. Some Western ranchers complain of unreasonable permitting conditions placed by federal agencies – particularly the U.S. Forest Service – where a portion of flows previously used by agriculture is, in essence, extorted by the agencies as

² Human Dimensions in Natural Resources Unit, Dep't of Natural Resource Recreation and Tourism, Warner College of Natural Resources, Colorado State University. 2006. Public Attitudes About Agriculture in Colorado. Colorado Dep't of Agriculture. 95pp.

part of permit re-issuance processes. An independent assessment of this matter could help clarify concerns associated with increased conflicts (ditches originating on federal lands, reservoirs backing into federal lands) with the U.S. Forest Service. The Forest Service issue is an important one in the intermountain states.

These are four issues that, if properly addressed, would actually help farmers and ranchers, rather than offering up weapons to the critics of irrigated agriculture.

Conclusions

A “politically correct” mindset seems to have become fashionable when it comes to Western water policy. That mindset assumes that the policies of the past, the policies that enabled the West to be settled and to flourish, have now outlived their usefulness and practicality. It is a belief that we no longer need to manage Western water resources in a manner that continues to encourage investment in agricultural production. And many times, it is also a mindset that believes that the continued development and use of Western water resources for agriculture is inconsistent with the nation’s goals to protect and steward the environment.

Western water policy, over the past one hundred years, is one of the great success stories of the modern era. There are over 180 federal water projects in the 17 Western states, which provide water to more than 31 million people, and provide 140,000 farmers with irrigation water on 10 million acres of farmland. These lands produce 60% of the nation's vegetables and 25% of its fruits and nuts. Millions of acres of arid Western desert have been transformed into the most efficient and productive agricultural system in the world.

Irrigated agriculture isn’t a good investment, it is an incredible investment³. It continues to be a leading economic driver in the West. However, the successes of the past have not come without a cost. The incredible expansion of the population, physical modifications made to rivers and streams, and agricultural practices themselves have impacted the environment. It is these impacts that are now causing many to question the policies of the past.

Resolving these issues without destroying what we worked so hard to achieve is the challenge that we all face. But to be successful, we must face them together. No resolution will be found unless we find a way to balance all competing needs in a way that supports continued growth of irrigated agriculture.

³ A 1998 study by Dr. Darryl Olsen and Dr. Houshmand Ziari, estimates the impact of irrigated agriculture in the Western states to be \$60 billion annually (direct and indirect income). The annual return to the economy from the \$11 billion investment in the federal system has been estimated at \$12 billion annually. In other words, the economy of the United States receives a greater than 100% return each year on this investment.

Western irrigated agriculture is a strategic national resource, and the role of the federal government in the 21st Century should be to protect and enhance that resource. The background information accompanying the agenda for the October meeting focuses on perceived negative aspects of agriculture, and the proposed areas of investigation could possibly lead to white papers that will provide further ammunition for critics of irrigated agriculture. The USDA is viewed by many of the farmers on the ground as one of the few remaining government agencies that actually champion agriculture. It is possible that well-earned reputation will be diminished if the Advisory Board chooses to focus its priorities on perceived negative water quality and quantity impacts caused by agriculture.

By recognizing the value of irrigated agriculture; by understanding the current and future role of irrigated agriculture in the West, by ensuring that federal watersheds are properly managed, and by encouraging federal agencies to work with the agricultural community to solve local water challenges, the Advisory Board can play a truly important role in helping to solve the water issues that today seem so insurmountable.