

## Preserving Western Agricultural Water Use Against New Demands

Dan Keppen, Family Farm Alliance

*Dan Keppen is Executive Director for the Family Farm Alliance, a non-profit association that advocates for family farmers, ranchers, irrigation districts and allied industries in 17 Western States. He has 27 years of experience in water resources engineering and policy matters. Since the mid-1990s, Dan has worked primarily in advocacy positions representing Western irrigators, including over three years as executive director of the Klamath Water Users Association (KWUA), where he was intimately involved with one of the most contentious water crises in the West. He served a one-year assignment as special assistant to the Bureau of Reclamation's Mid-Pacific Regional Director. Prior to that time, Dan was a water resources engineer for Tehama County, California and a water resources engineering consultant in the Portland, Oregon area.*



*Dan received his MS in civil engineering (water resources) from Oregon State University and his BS in petroleum engineering from the University of Wyoming. He is a Registered Professional Civil Engineer in California and a past Civil Engineer and Certified Water Rights Examiner in Oregon. He has testified before Congressional environmental and water committees 16 times on water resources, environmental and climate change matters. In his decade at the Alliance, the organization has been asked to testify before Congress 50 times.*

*Dan lives in Klamath Falls, Oregon and is the past president of the Klamath County (OREGON) Chamber of Commerce board of directors. He serves on the agricultural water conservation work group as part of the Bureau of Reclamation's "Next Steps" phase of the Colorado River Basin Study process. He served three years on the national Irrigation Association and U.S. Water Alliance board of directors as well as dozens of other water and environmental committees throughout the Western U.S.*

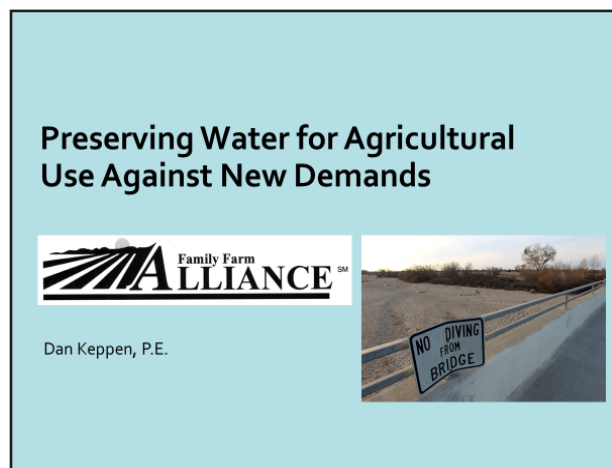


Figure 1. Introduction. This is a panel discussion session concerning the security of our food supply and what can be done to strengthen food system capacity to withstand shocks and stresses that could lead to disruption or shortfalls in the supply.



Figure 2. About the Alliance.



Figure 3. The economic importance of Western irrigated agriculture.

A Politico 'The Agenda' graphic about the water issue in Washington. The graphic is set against a dark blue background. On the left, there is a red square with the word 'POLITICO' in white. To its right is a smaller square with a blue and white wavy pattern, containing the text 'THE AGENDA THE WATER ISSUE' and a 'SEE FULL ISSUE' button. Below these is a photograph of a red fire hydrant on a rocky shore next to a body of water. At the bottom left, it says 'Welcome to the Water Issue' and '05/25/16 04:55 AM EDT'. On the right side, there is white text: 'SO WHAT CAN Washington do to protect against drought and ensure we have clean drinking water? Our respondents weren't impressed with how the 2016 presidential candidates have proposed addressing these issues. In fact, they haven't heard much at all. "It would be nice to have it even mentioned." Dan Keppen, executive director of the Family Farm Alliance.'

Figure 4. Washington's response to drought and clean drinking water.

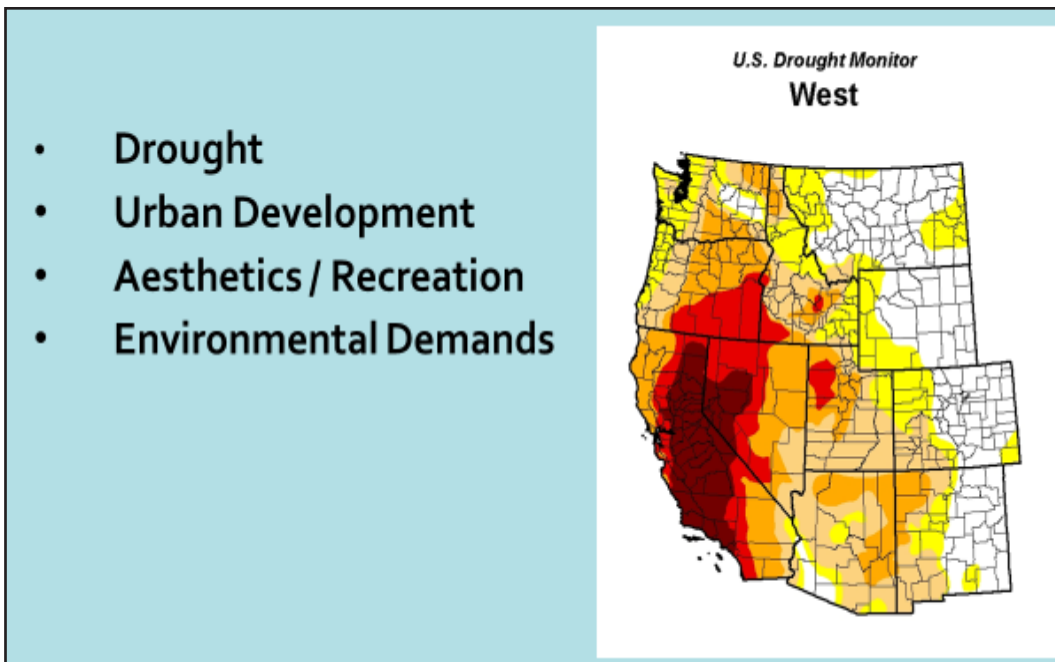


Figure 5. Stressors to agricultural water.



Figure 6. 2015 farm water drought impacts to California agriculture.

- For two years in a row, many agricultural water users received **no allocations** at all from the federal Central Valley Project (CVP), one of the largest water projects in the world. This year, they received **5%**.

### Central Valley Project Water Allocations (2014 & 2015)

Contractors	Percent Supply	
	05/13/14	02/27/15
<b>North of Delta</b>		
Agricultural Contractors (Ag)	0%	0%
Urban Contractors (M&I)	50%	25%
Wildlife Refuges	75%	75%**
Settlement Contractors / Senior Water Rights	75%	75%**
American River M&I Contractors	50%	25%
In Delta-Contra Costa	50%	25%
<b>South of Delta</b>		
Agricultural Contractors (Ag)	0%	0%
Urban Contractors (M&I)	50%	25%
Wildlife Refuges	65%	75%**
Settlement Contractors / Senior Water Rights	65%	75%**
Eastside Division Contractors	55%	0%
Friant - Class 1	0%	0%
Friant - Class 2	0%	0%
** - May be reduced if dry conditions persist		

Figure 7. Central Valley project impacts.

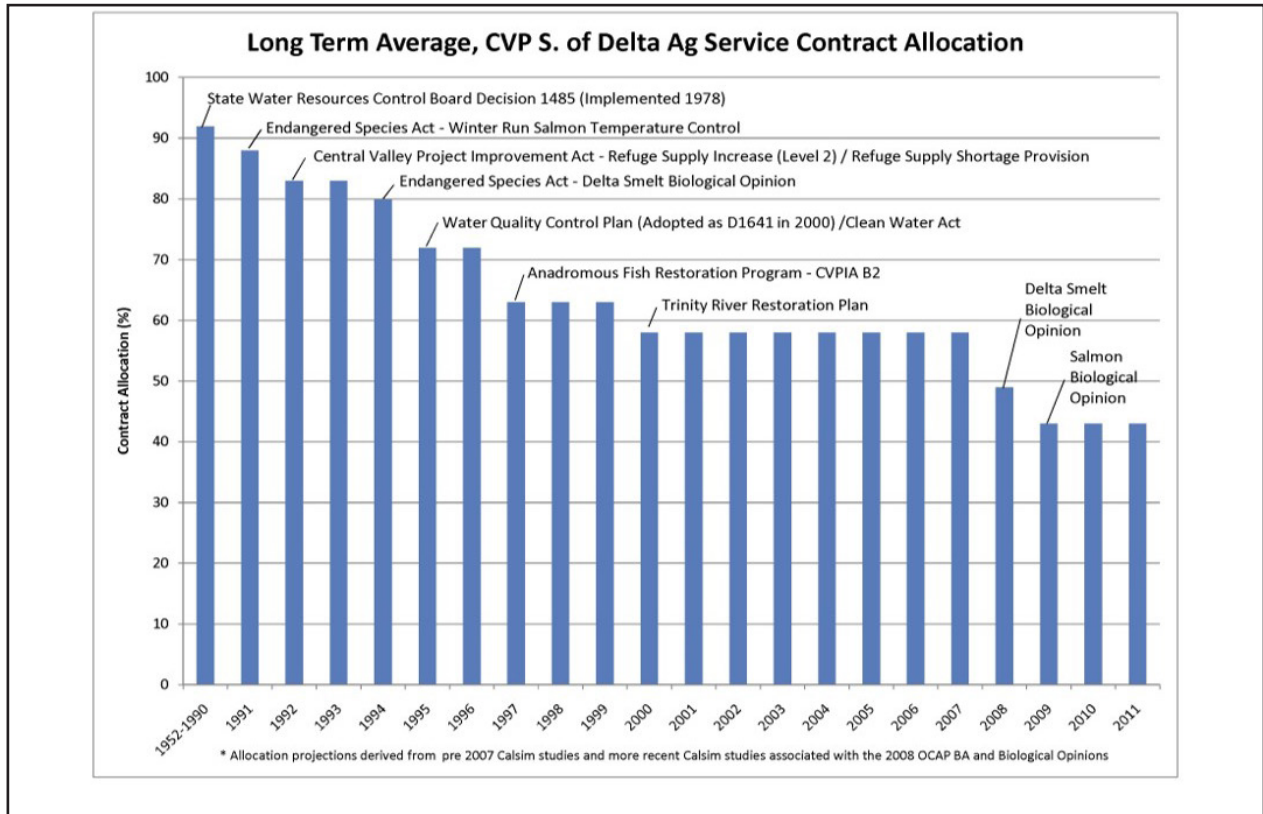


Figure 8. Death by two dozen regulatory cuts.



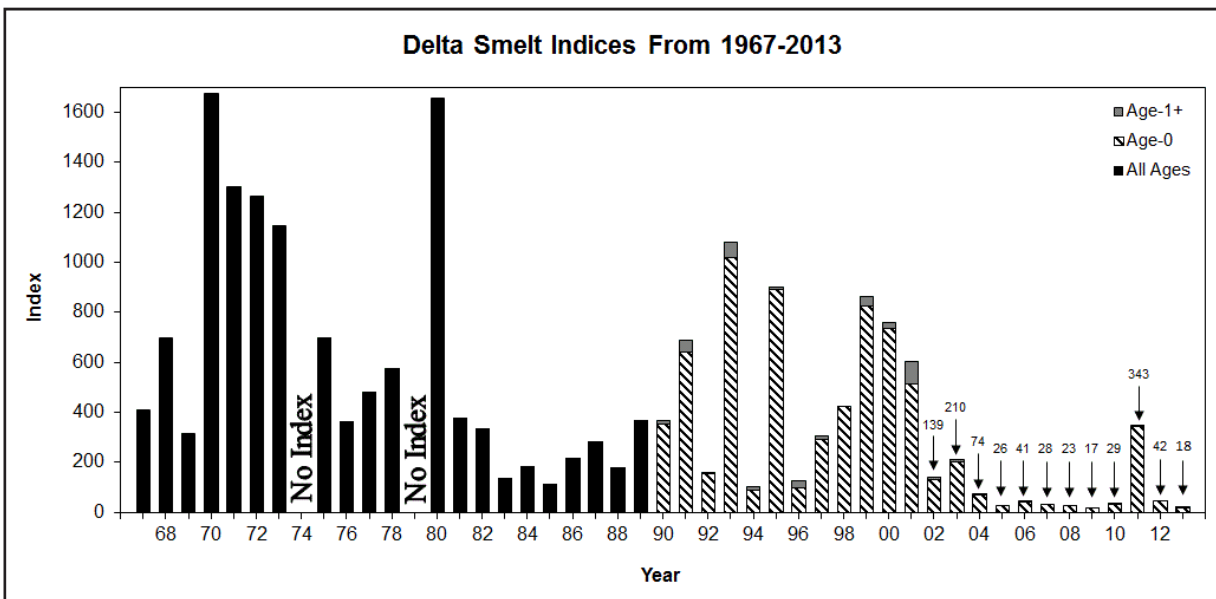


Figure 9. Response from delta smelt populations.

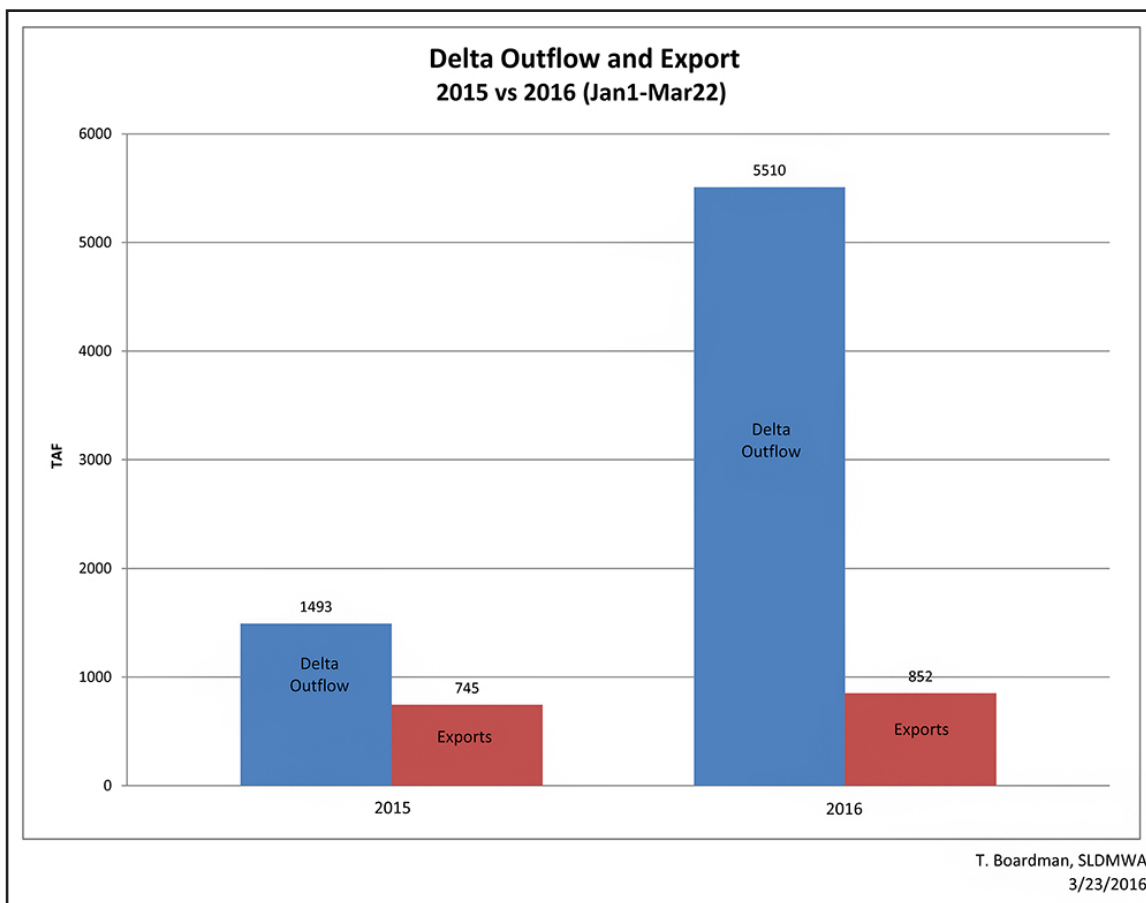


Figure 10. Regulatory drought: a picture is worth a thousand words.

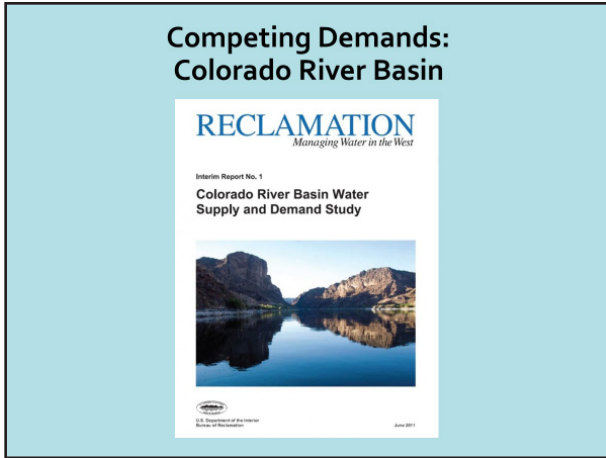


Figure 11. Competing demands for the Colorado River Basin.



Figure 12. Basin study projections.



Figure 13. Basin study projections (Cont.).



Figure 14. Basin study projections (Cont.).



Figure 15. "Newbies" with different priorities.

- Columbia / Snake River System: Focus on Dam Removal
- Klamath River Basin
- Platte River
- Rio Grande

Figure 16. Other western water “hot spots.”

- Encourage accurate measurement and portrayal of water use and beneficial use data.
- Find ways to streamline regulatory hurdles assist in developing new environmentally sensitive storage projects and other necessary infrastructure improvements.




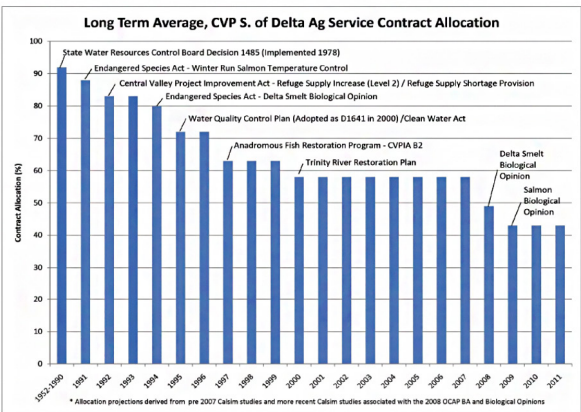
Figure 17. What can be done?

- Provide additional funding to support WaterSMART and/or other programs that provide incentive-driven cost share money for new water conservation projects.
- Provide sufficient funding to implement and expand produced water pilot projects.



Figure 18. What can be done (Cont.)?

- Improve ESA transparency and species recovery
- Require fish and wildlife agencies to inject some reality, set priorities and be accountable in their effort to manage the environmental share of the water pie



**Long Term Average, CVP S. of Delta Ag Service Contract Allocation**

Year	Contract Allocation (%)
1992-1998	~90
1999	~88
2000	~85
2001	~82
2002	~80
2003	~78
2004	~75
2005	~72
2006	~70
2007	~68
2008	~65
2009	~62
2010	~58
2011	~55

Annotations on chart:  
 - State Water Resources Control Board Decision 1485 (Implemented 1978)  
 - Endangered Species Act - Winter Run Salmon Temperature Control  
 - Central Valley Project Improvement Act - Refuge Supply Increase (Level 2) / Refuge Supply Shortage Provision  
 - Endangered Species Act - Delta Smelt Biological Opinion  
 - Water Quality Control Plan (Adopted as D1641 in 2000) / Clean Water Act  
 - Anadromous Fish Restoration Program - CVPIA B2  
 - Trinity River Restoration Plan  
 - Delta Smelt Biological Opinion  
 - Salmon Biological Opinion

\* Allocation projections derived from pre 2007 Calsim studies and more recent Calsim studies associated with the 2008 CCAP BA and Biological Opinions

T. Boardman, SLD/MNA 10/25/2013

Figure 19. What can be done (Cont.)?

- Incentivizing Proactive Voluntary Conservation
- The Role of State and Local Governments in Species Conservation and ESA Implementation
- Landscape Level Conservation and Ecosystem Management
- Investment in Science and Measurable Outcomes:
- Listing, Recovery and Delisting Process of the ESA Law and Policy Recommendations



Figure 20. Western Governors’ Association Endangered Species Act Initiative common themes.

- Protect and respect water rights
- Provide alternative financing mechanisms to give water users tools to address aging and insufficient water infrastructure needs



Figure 21. What can we do?



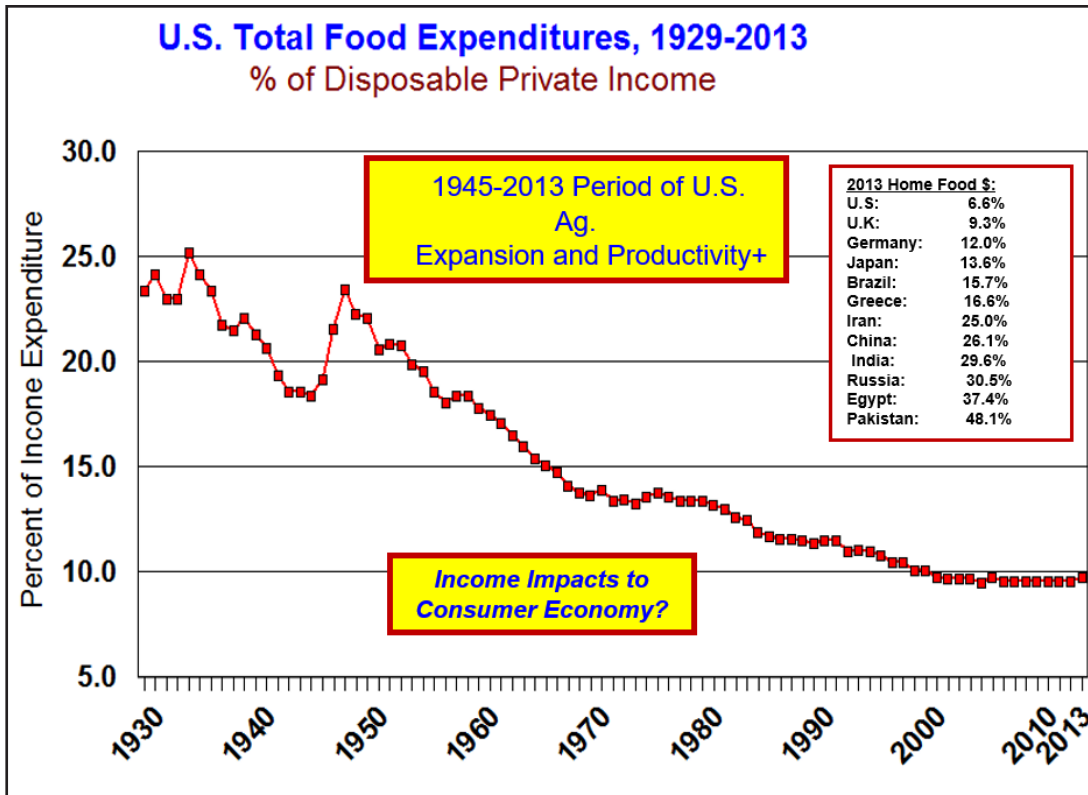


Figure 22. Underscore the Economic Significance of Agriculture.

- **Bring the question of U.S. food security into the economic analysis of irrigation projects.**
- **Make sure the issue is recognized by decision makers.**

Figure 23. Other ways to improve decision making.

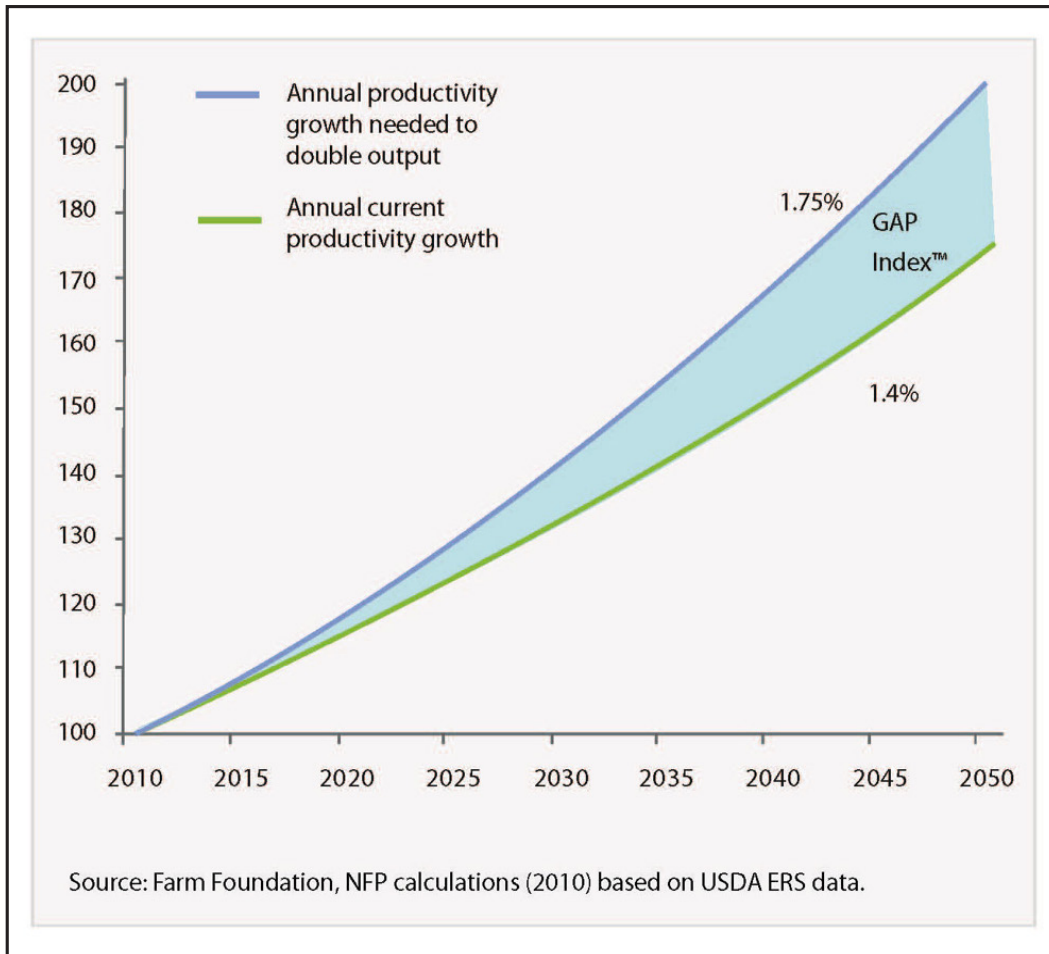


Figure 24. The world food supply “GAP.”

- We would like to see water policy officials run another scenario: one that assumes that irrigated acreage will not be diminished, and may, in fact, need to be expanded.

Figure 25. A new paradigm.

- We cannot continue to downplay or ignore the negative implications of reallocating more agricultural water supplies from Western watersheds to meet new urban and environmental water demands.

Figure 26. Concerns.



**Op-Ed: Rural America Is Back In Business**

WASHINGTON, Sept. 7, 2016 —  
 By: Agriculture Secretary Tom Vilsack

“...it's good news that in all corners of rural America, we're seeing real, positive change take hold for the first time in the years since the Great Recession.”

Figure 27. Disconnects.

**“Wow, oh wow; are you kidding me? Clearly he hasn't visited "our" rural areas of multiple food bank deliveries to many "prosperous" people he's encountered.”**  
*Fresno County, California*

**“Imagine how much worse it could have been from the double digit unemployment, overwhelming need for social support, billions of lost economic activity, ignored socio-environmental damage and broken dreams, with absolutely no benefit for fish species? Apparently we're not rural enough.”**  
*Los Banos, California*

**“He doesn't have a land loan an equipment loan and an operating loan trying to make a profit to feed a family and repay loans with very little or no water to grow a crop.”**  
*Yuma, Arizona*

Figure 28. Reactions.

- Policy makers and elected officials must clearly understand the importance of Western irrigated agriculture and the implications associated with drying up land currently producing food in the West.
- We'll do our best to advocate towards that end.




Figure 29. Conclusions.

