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# Debate:

The Arizona Department of Water Resources in 1998 declared the Prescott Active Management Area to be groundwater mining and said it must reach a state of safe-yield by 2025. Recently the state said it is a guideline rather than a deadline with consequences if the area does not meet it. Should local governments face legal consequences for not meeting the deadline?

## Not meeting safe yield holds consequences

By JOHN ZAMBRANO  
Special to The Courier  
Every year, wells in the Prescott Active Management Area (PAMA) pump out more water than area water users and nature recharge.

Our aquifer is out of safe yield. Arizona defines safe yield as a groundwater management goal that seeks to achieve and maintain a long-term balance between withdrawals and natural and artificial recharge. The state would like us to be in safe yield by 2025; however, the law provides no regulatory programs for achievement or penalties for failure. Safe yield is only a goal, and achievement is voluntary.

We can't overdraft out aquifer indefinitely

demand from the many previously approved, but unbuilt, plats in the region. These expected increases in groundwater use and the use of alternative water for new subdivisions can continue beyond 2025 even if the area has not achieved safe yield.

The state should consider limiting the number of new subdivisions and exempt wells and tying their approval to a schedule of milestones including incremental reductions in the overdraft between now and 2025. This would provide a strong incentive for all the users to develop a joint plan specifying how much groundwater each can pump and safely how much water each must

## Locals must take the lead, not the state

By HERB GUENTHER  
Special to The Courier

Nine years ago, the Arizona Department of Water Resources declared that the Prescott Active Management Area (AMA) was out of "safe-yield."

It acted because:

- Many exempt wells – all eligible to pump 35 gallons per minute – exist in the AMA. ADWR lacks statutory authority to regulate exempt wells. Thus it has no firm idea how much groundwater the exempt wells are pumping.

- Although tighter regulations on groundwater use became effective in January 1999, developers had several months' lead time to file thousands of plats under the "old" regulations, which draw down even more groundwater.

- The Prescott AMA lacks a delivery system or

have authority to demand compliance with requirements of the Groundwater Code and the management plans in effect, and to take enforcement actions against violators. This authority rests primarily in the area of conservation requirements.

We intend to help towns and cities within the AMAs in reaching safe-yield. We will continue to employ educational and outreach tools, and regulatory measures such as conservation and assured water supply programs. We will continue to pursue appropriate compliance and enforcement actions.

The department will continue to provide strong leadership and encourage the Prescott AMA to attain safe-yield.

Drafters of the Groundwater Code recognized that

y. If we don't achieve safe yield we will have severe problems. As the water levels continue to decline, wells will go dry, streams will disappear, the soil structure will change and the aquifer will not be able to deliver enough water for our communities. Property values and population will decline.

These problems are not immediate, but it is their lack of immediacy that enables our officials to avoid the difficult decisions needed to achieve safe yield. Although it would be preferable for our communities voluntarily to develop and implement a plan to achieve safe yield, their track record is poor. The state needs to consider establishing consequences.

With our aquifer in overdraft, the state requires that new subdivisions receive "alternative water," which is any water other than PAMA groundwater. This restriction, however, does not help eliminate the current overdraft. Furthermore, it does not apply to exempt wells or commercial and industrial development, or satisfy additional

dedicate to safe yield. Currently, local governments may obtain a credit for effluent they recharge to the aquifer. This credit allows localities to pump additional water from the ground, and use it for new subdivisions. The state could require that localities recharge all new effluent permanently where local entities have not achieved safe yield.

This requirement would be similar to a provision of Proposition 400 that the City of Prescott voters approved overwhelmingly in 2005. Permanent recharge of effluent would help us reach safe yield.

If we are going to achieve safe yield before we experience severe hardships, we need regulatory consequences. The Arizona Department of Water Resources should take the lead in establishing new regulations. I have presented some ideas, but it should consider others as well.

*(John Zambrano is a retired environmental engineer and vice-president of the Citizens Water Advocacy Group.)*

the legal access to sufficient renewable water supplies to bring a sustainable source of water into the AMA to replace groundwater pumping.

In the 1980 Groundwater Code, the Legislature established safe-yield as a goal, not a mandate. Lawmakers directed the department to develop conservation requirements and assured water supply requirements to help the AMA's reach the goal. While water users must comply with the conservation requirements, individuals cannot achieve safe-yield by themselves. Cities, towns, the county and individuals must contribute to the effort.

Safe-yield is the long-term balance between groundwater withdrawals and natural and artificial recharge in an AMA. Since it is the goal for the Prescott AMA as a whole, achievement means the AMA - as a whole - is at safe-yield by 2025.

The department recently began assessing each AMA's progress toward its goal. We will use water budgets and groundwater monitoring to determine achievement of safe-yield.

While the department has no statutory authority to act if localities do not reach safe-yield, ADWR does

achieve of safe-yield in an AMA may not be possible through the code's regulatory programs alone. So they included authority for the department to collect an additional groundwater withdrawal fee beginning in 2006 for buying and retiring grandfathered groundwater rights in the AMA.

However, because of the limited amount of fees the department could collect and the high cost of buying grandfathered rights, it would not be cost-effective to pursue this option without an additional appropriation. To date, the legislature has not appropriated any money for this purpose.

The community bears responsibility for wise, restrained use of this vital resource.

Biologist Garrett Hardin once wrote, "Ruin is the destination toward which all men rush, each pursuing his own best interest in a society that believes in the freedom of the commons. Freedom in a commons brings ruin to all."

In other words, selfish interests can keep a community from reaching a goal that benefits all.

*(Herb Guenther is director of the Arizona Department of Water Resources.)*