Western Rivers, the Salton Sea & Us

Bill Maher is right on this one

Last week’s column (September 30) dealt with Santa Barbara’s worsening water shortage issues – August was the driest year in the last 127 years for which we have good records! All 423,895 of us in Santa Barbara County moved past “Extreme” drought to the worst of the National Weather Service’s five categories of drought: “Exceptional.” We are all affected by it, and the worst will be increasing our experience each year.

As the column concluded, our best short and intermediate solution is to invest in moving our desalinization efforts uphill to where seawater could be pumped up from the current desalinization point, rather than pumping fresh water up from a desalinization plant which will be underwater in a couple of decades, long before the plant is worn out. We MUST consider sea level rise now, before it is a crisis and before we spend enormous sums of money on the proposed freshwater pipeline that will quickly become obsolete. We should be building our desalination efforts where sea level rise will not adversely affect our water supply no matter how bad climate change gets—because we are guaranteed it will get much worse. According to calculations reported by Al Gore, which have never been disproven, we will see hundreds of feet of sea level rise from melting ice all around the globe and the expansion of sea water from heating. That reality is decades, not centuries, away.

In addition to getting our desalination plant in the right place before we pay for new piping and pumping equipment, we also mentioned an alternate solution to Exceptional Drought. Comedian Bill Maher has been vigorously proposing water pipelines to the Southwest on his weekly HBO television show. We have approximately three million miles of natural gas and petroleum pipelines in the US. Maher asks the obvious question: if we can build all those fossil fuel pipelines, why can’t we build some to carry water from places that have too much water to the drought-stricken Southwest where we don’t have enough? Unfortunately, some social media sources with inadequate economic, geographic, or engineering backgrounds have been saying it isn’t possible.

They’re flat-out wrong. Of course, we can do it, and we should.

Think of it: 75 percent of the American West is in a “megadrought” as evidenced by the Colorado and Rio Grande Rivers drying up. That’s crazy! California is the Nation’s food basket, and it is running out of water. The entire inland valley, once wall to wall with agriculture, has seen the floor of the valley drop several feet from subsidence as the underlying water table falls. That’s crazy! Private citizens are being forced to ration water all over the Southwest as the drought deepens and extends exponentially into the future. That’s crazy!

So, knowing it is crazy, why don’t we build a fraction of the pipeline miles already in place that moves petroleum and natural gas (along rights of way that will prove very valuable) for moving water? Makes all the sense in the world.

Upon hearing this idea, one social media commentator said, “You’ll need too much energy to move it over the Rockies.” Wrong. There are no Rockies on the route from the Midwest through New Mexico, Arizona, Nevada, and California. In fact, we need two pipelines: one for fresh water to recharge the Colorado River
(thereby finally honoring our treaty obligations to Mexico), and a second one to come through the San Gregorio Pass at a maximum of 2,600 feet. The same place the Union Pacific Railroad used in 1883 to construct the second transcontinental railroad. Coincidentally, that pass is one of the premier wind-energy sites in the US and could provide all the electricity needed for the journey through. Once on the other side of the mountains, the water could be pumped directly into the existing White Water River for distribution to San Bernardino and Riverside Counties, and directly into the Santa Ana River for distribution to Orange County including Anaheim, before flowing finally into the Pacific Ocean. Using existing river systems is a great way to reduce the cost of the pipeline by using existing riverbeds, and also adds other riparian benefits as we restore significant daily water resources to support flora and fauna in the now very urbanized area.

An additional benefit that arises from pumping water into the Whitewater River is that it would bring water to re-charge ground aquifers in Palm Springs and the Coachella Valley, while at last solving the crisis of the Salton Sea. Many people are not aware that climate change caused the shrinking of the Salton Sea and a dramatic increase in its salinity such that fish cannot survive there, birds and animals can’t drink it, and agriculture can’t use it. In addition, a major health crisis has emerged from the toxic dry lakebed particles that become airborne in the wind and pose a serious health threat to over 650,000 Californians living nearby.

There would be two ways to pay for the pipeline construction: 1) use funds in the new infrastructure bill pending before Congress, or 2) use California revenue bonds (alone, or together with funds from other states) and permit an acceptable rate of return from use of the pipeline for each gallon that flows through it to cover repayment. In addition to construction costs, there will be on-going costs for pumping the water and ongoing maintenance for the century-long useful life of the pipes. A “Master Limited Partnership” (“MLP”) like Magellan Midstream Partners uses already provides this service for an enormous number of pipeline miles that are used for fossil fuels. The same formula would work for water. The MLP wouldn’t own the pipeline, just as Magellan doesn’t own the fossil fuel pipelines it currently manages. Undoubtedly, Magellan and other MLPs would welcome water as a new commodity to charge for as it flows through the pipes.

The question to focus on is not whether but precisely how to construct such a crucial piece of infrastructure. If you think we need to repair our roads and bridges, you’re right. But, on the scale of what is critical, getting fresh water to California’s inland areas where desalination isn’t possible is far more critical. So, while I do not always agree with Bill Maher, he is absolutely correct to ask:

“Why don’t we just build it?”

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