SYNOPSIS OF PROPOSED WATER FOR SALE IN OTHER GEOGRAPHIC AREAS

We are submitting this document to all concerned citizens and organizations that will be affected by water decisions in order to put forth the adverse effects of applications to pump water and sell it in other geographic areas. We further state that we are doing this not for financial or political gain, but to help keep secure the natural infrastructure of water resources in all affected areas of the State of New Mexico and beyond.

Item 1. Extent of Regional Aquifer: Regarding the Augustin Plains Basin, we offer this opinion: that waters throughout the extent or reach of this aquifer and/or interconnecting water aquifers flow underneath the Rio Grande River. Over-pumping water from the basin will therefore adversely affect downstream deliverables.¹ That being the case, it is imperative that all possible requests for drilling permits be studied on a larger (multi-regional basis) modeling scale for possible impacted areas.

Item 2. Over-pumping: An example of what happens when a water basin is over-pumped is the Phoenix Valley. When that valley was excessively over-pumped, cavitation occurred; thereafter it was necessary to minimize the amount of water that was pumped. Cavitation also restricts the limits of recharge because the storage capacity is shrunken. According to Frank Titus, the only hydrologist to study the Augustin Plains Basin, pumping 54,000 acre feet per year from the Augustin Plains aquifer, as proposed by the Augustin Plains Ranch LLC, will result in the aquifer being depleted of water within ten years. In addition, the subsidence of the land will ensure that no water will again flow to the basin.

Cavitation will affect the whole region in a very strategic way because the Basin is interlinked to the Continental Divide, and over-pumping will diminish all perched aquifers due to pressure release, which keeps these aquifers perched.

Examples of what happens when you over pump a water basin is the Phoenix Valley. When it was excessively over pumped, it caused cavitation therefore they had to minimize the amount of water that they were pumping henceforth. This cavitation also restricts the limits of recharge because the storage capacity is shrunken. In addition, because of strategic geographic location, this cavitation will affect and break the back of all the possible deliverable water on both the Eastern and Western sides of the Continental Divide. Because these perched and regular aquifers are used to water crops and cattle, and to supply homes, cavitation will be devastating to the people from all walks of life that live in the lower and middle Rio Grande regions, all the way to the Gulf of Mexico.

There is no way the use of this amount of water is sustainable in a time of severe drought; the claim that the water is available is unfounded. All deliverables to the south and beyond will be devastated.

Item 3. Water Dating: There is little recharge to the Augustin Plains Basin and, as the current drought conditions persist, the draw-down effect of over-pumping the Plains Basin will reduce deliverables to the Rio Grande. More than seven years ago when I (Michael Loya) filed my original protest against this water application I stated to other Protestants that this water must be dated. Now, seven years later the water has been finally dated; two sample-dating's show that the water in part of the Basin is 22,900 years old, and in another part of the basin is 19,020 years old. The age of that water demonstrates unequivocally that the Basin and region have virtually no water recharge to all aquifers.

Item 4. The Proposed Santolina Project: This housing/commercial development proposed for the more than 13,700 acres of undeveloped land southwest of Albuquerque threatens water resources throughout

¹ See attached article, "Tensions Over Rio Grande Escalate With Drought"

the Rio Grande region. Planned for 99,000 new residents, this project, if approved, will further stress already stressed water resources.

"Santolina's plans claim that it will have a total demand of 38.7 MGD, or 43,350 acre-feet, at full buildout. The Master Plan demonstrates 'an integrated and self-sufficient model of development,' per the Bernalillo County Zoning Ordinance ...But how can relying on another governmental entity to supply water and wastewater services be self-sufficient? Where will the water for Santolina come from? What does that mean for the rest of us?"²

While the Albuquerque Bernalillo County Water Utility Authority (ABCWUA) declares that there is water available for such a project, the ABCWUA has not given exact quantitative findings and speaks only in general terms. The claim is unsubstantiated and at best suspect. According to Contra Santolina, "this entire area, at present, has no water rights. If this development were to be approved, the water it needs could only be provided by *taking it from others* ..."³ Eventually this project will be looking to rural areas for additional water, and will threaten all southern deliverables and beyond to Texas. The Augustin Plains Ranch LLC's proposed pipeline, which is shown on its plan map, passes near the Santolina Planned development and is an example of a plan to move water from a rural area to urban development, a trans-basin geographic transfer.

Item 5. Who we are: We are Farmers, Ranchers and Regular Citizens from all walks of life and all geographic areas of the State and beyond. We, our concerned advisory partners have practical backgrounds in Water, Environmental Cleanup of various applications, Infrastructure, Construction, Sustainability and Engineering. Decisions made about water today must take into account the agricultural community and the people across the State and far beyond, as we are in an extended mega-drought.

In conclusion, it is our firm belief that no permits should be issued for any drilling and pumping of water for sale or shipment to other geographic areas previously applied for, other than for local domestic use and for planted crops or livestock and keep secure documented water deliverables all the way to the Gulf of Mexico.

> Respectfully submitted, Michael Loya, Executive Director Sustainable Research Center <u>www.SustainableResearchCenter.org</u> <u>sustainableresearchcenter@gmail.com</u> <u>Sustainable Research @sustain4ever1</u>

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². Synopsis of proposed water for sale in other geographic areas

^{3.} https://www.academia.edu/7624611/La Voz Special Edition on the Santolina Master Plan by Elaine Hebard

^{4.} https://contrasantolina.files.wordpress.com/2015/02/fact-sheet-page-11.jpg

^{5.} Seven States Running Out of Water Story PDF

^{6.} Proposed Santolina Development Threatens South Valley Acequias

^{7.} The Santa Fe New Mexican: Local News Official: New Mexico water debate to be shaped by transfers