

You can download the [Espanola Basin Sole Source Aquifer System Petition](#). Requires Adobe Acrobat Reader.

What does the Espanola Basin Sole Source Aquifer System Designation mean for New Mexico?

What is a Sole Source Aquifer (SSA) is the first question people have when hearing about the petition that CES filed in May. Citizens for Environmental Safeguards identified the geo-hydrological boundaries within the Espanola Basin Aquifer System and have shown that over 51% of the aquifer drinking water is from groundwater. Further, we were able to identify that there are no alternative sources that could supply over 51% of the Aquifer if there were to be a major contamination. Our first time applying for this designation we did not include stakeholders in the process and did not do the environmental education on what our intention was and how it might affect those concerned. This was our mistake and we learned from it. This time around we worked with the USGS, and state agencies like NMED, the Office of the State Engineer, the Interstate Stream Commission, the Espanola Technical Advisory Group (EBTAG), the various eight Pueblos involved, all that were open to listening to what we were doing and why. We have informed various environmental groups and the City and County of Santa Fe, Espanola, Los Alamos and even spent one day standing outside the State Engineer's office talking to people and passing out leaflets on the designation and what this designation means. We have also talked to our congressional delegation and the need for support, their work will be cut out for them.

Of course, the two vocal oppositions came from the County of Santa Fe and Los Alamos because of perceived view points that this was to stop development, that it is another level of federal oversight not needed and the County of Santa Fe thought it could deliver other alternative water sources with all their virtual water schemes, but I doubt the County could provide 51% of the total aquifer amount at a feasible cost not over 25% at the current cost of water delivery. I hope to assure the readers as to how this process works and what solutions can be met as a result of this designation. (See www.environmentalsafeguards.org and click on water and download the PDF EBSSAS petition.)

After designation of an SSA, the EPA may review projects proposed for the area, and may deny Federal financial assistance for any project that might contaminate the aquifer. In some instances, such projects are subject to State or other Federal requirements protecting ground water, but in other instances they are not, depending on the nature of the project. In enacting SDWA §1424(e), Congress did not include a provision for denial of a petition for designation on the basis that it would result in duplication of existing environmental safeguards.

At this time there is no Federal funding dedicated specifically to prevent pollution of a SSA. A Federal agency may, however, include pollution prevention costs in the development of its project(s). However, with this designation there are available federally

allocated funds to the State under, Source Water Protection Funds (SWP) that with a 50 % cash match, Pueblos, municipalities and other water entities may apply for source water protection for example, as in Pojoaque Valley regarding the nitrates, radon, and naturally occurring uranium challenges.

Additionally, SWP could also be used for the Buckman Diversion Project to decontaminate the water from Plutonium 239/240 now at .06 pCi/g, which is 6 times higher than atmospheric background and other contaminants from LANL waste. This year EPA is expected to change the safe drinking water standard that would put this plutonium level at the maximum level for safe drinking water. How much plutonium is really safe to drink and how much do you want to drink? This is a very serious issue for Santa Fe if they are to transfer contaminated water into the basin, into the treatment plant and into our homes.

Under the provisions of the law EPA can only review projects for which there has been an application for Federal financial assistance (including loans, loan guarantees, and grants). The SSA program is not without its limitations, it is not intended to inhibit or stop development of privately financed landfills or other projects that are not federally financed. The SSA program applies to Federal assistance, but not to direct Federal actions. Work performed for or by the Federal government is not included among the projects that will be reviewed by EPA. In other words, most of the work at LANL work would be exempt.

When an aquifer is designated, EPA identifies a project review area that defines the total area where EPA may review and act on projects that have Federal financial assistance. The project review area covers the designated aquifer and might also include the "Streamflow Source Area" which is the surrounding land surface that drains onto the aquifer. This can cover a wide range of problems and responses. In some cases, additional design features are needed to prevent contact of contaminants with the ground surface. This might include installing low permeability liners or barriers to contain spills or prevent seepage into the ground. Modifications might also include management of storm water runoff, or planned discharge, to route flow away from vulnerable areas. The EPA may evaluate any project in the project review area that is supported by Federal financial assistance. The Agency focuses on those projects that involve hazardous or toxic substances. Projects that pose little threat to the aquifer, such as individual home construction, will not be reviewed. Types of projects commonly reviewed include highway construction, projects involving sewage or animal waste, and assistance for commercial or industrial projects.

Thus, government programs might include special provisions for ground water protection in SSAs. The EPA recommends higher priority for scheduling remediation and protection activities in areas with ground water of higher use and value, including SSAs. So the Superfund sites in Espanola and other places in the aquifer system would receive a priority status.

The Sole Source Aquifer Program is a small program within EPA they have not turned down any project that has come before them but have implemented safeguards that would not have been included otherwise. What does the aquifer designation mean for New Mexico? It attempts to solve short term and long term water quality problems. It shows our children what value we put on water and on our quality of life. The designation as an SSA is a declaration that the aquifer is a valuable resource justifying special consideration under water management and protection programs that are implemented in the State. It would be the first designation within the state of New Mexico. With the serious threat of global warming, climate change that will bring reduced snowpack, drought, floods, and excessive evaporation all of this will impact and we will rely more heavily on groundwater than ever before. We need to show our children that we did something to recognize that we understand that water is life. Support the designation the EPA Comment period ends September 12 th , 2006.

All comments are to be addressed to:

<http://www.epa.gov/earth1r6/6wq/swp/ssa/index.htm>

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**Historical storm events transported contaminants off-site and were redistributed downstream in fine sand and clay beds and in the channel of the Rio Grande at Canada de Ancha at the Buckman Wellfield and the site of the proposed Buckman Diversion. Plutonium 239/240 was measured in sediment cores at Canada Ancha up to 0.06 pCi/g, over 6 times higher than that of atmospheric fallout conditions. – EBSSA petition 3.3.2 Potential Threats to Aquifer.