



ALEXANDER VALLEY ASSOCIATION ● DRY CREEK VALLEY ASSOCIATION ● RUSSIAN RIVERKEEPER
WESTSIDE ASSOCIATION TO SAVE AGRICULTURE ● BISHOP'S RANCH ● SODA ROCK NEIGHBORHOOD ASSOCIATION

QUESTIONS & ANSWERS

ABOUT

NSCARP

North Sonoma County Agricultural Reuse Project
BACKGROUND FOR MEMBERS OF THE MEDIA

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QUESTIONS AND ANSWERS ABOUT NSCARP
North Sonoma County Agricultural Reuse Project

MEDIA BACKGROUNDER

1. What is NSCARP?

NSCARP, the North Sonoma County Agricultural Reuse Project, is a project planned by the Sonoma County Water Agency (SCWA). The project proposes to replace current supplies of agricultural irrigation water in Alexander, Dry Creek, and Russian River valleys with the partially treated liquid portion of municipal sewage (“wastewater”). One hundred and eleven miles of pipeline would convey over 4 billion gallons of wastewater across over 21,000 acres of prime wine growing regions, propelled by 16 one thousand horsepower pumps. The Agency plans to store the wastewater in nineteen newly constructed reservoirs.

2. What is the issue?

The safety of current and future drinking water supplies. On its surface, the idea of dispersing municipal wastewater across thousands of acres of vineyards appears to be a desirable, even “green” scheme. However, the potential for serious pollution from irrigation with partially treated wastewater raises many concerns about the safety of current and future County water supplies.

3. How will this project affect wineries, agricultural tourism and other businesses in Northern Sonoma County?

Very significantly, and perhaps catastrophically for small wineries. NSCARP will affect virtually every business in the Healdsburg and surrounding wine growing areas. Concerns to farmers, winemakers and others involved in the agricultural tourism industry include, but are not limited to, the following: public perception of premium wines being produced from contaminated soils; marketability in a global environment where demand is for greater use of sustainable, organic and bio-dynamic growing methods; loss of tasting room revenues during lengthy construction periods; whether wastewater use for irrigation will be voluntary or mandatory; and what will be the long term effects on porous soils of deteriorating groundwater quality as a result of wastewater irrigation?

4. Isn't recycling wastewater desirable?

Wastewater recycling helps California meet its water needs only when water quality is protected. The NSCARP Project fails to meet this basic standard. Additional wastewater treatment would help resolve these issues.

5. What are they going to do with the wastewater if not this?

The bulk of the wastewater in the plan as currently proposed would come from Santa Rosa. However, Santa Rosa has contractually committed most of its additional wastewater to the Geysers thermal electric plant where it is converted to green electrical energy. Santa Rosa also continues to pursue other options such as re-use within city limits (parks, golf courses, etc.) for its remaining wastewater and has not granted use of its conveyance to NSCARP. In short, most of the wastewater is already being recycled in safer ways.

6. Isn't the wastewater nearly drinkable?

No. It is toxic. The phrase “near drinking water quality” is spin. At current local treatment levels, wastewater does not meet current drinking water standards. Typically, wastewater must undergo extensive natural filtration before it can be used as drinking water. Even water that is filtered and reverse osmosis treated to better than drinking water levels must still be filtered through an aquifer or soils over a specific period of time before it can be incorporated into a public drinking water system.

7. Recycled wastewater is used for irrigation, including vineyards, in some parts of California and even Sonoma County. Why shouldn't it be used here?

Soil conditions in Alexander, Dry Creek, and Russian River valleys make them unsuitable for wastewater irrigation. The porous valley soils, made up of sandy loam, sand and gravel, coupled with an often high water table, allow surface water to permeate to the groundwater rapidly with little retention of the water and little or no adsorption of contaminants present in the water. Thus, any contaminants will likely pollute the aquifers or leach into rivers and streams.

8. What are potential impacts on drinking water supplies from irrigating with recycled wastewater?

The wastewater proposed for the project is only partially purified (“tertiary treated”). It still contains many contaminants from urban and industrial sources. Some of these contaminants are known to be harmful to humans, particularly infants. Others (“emerging contaminants”) pose as-yet unquantified risks. The aquifers beneath the valleys provide an important future source of pure

drinking water for Sonoma County. Many drinking water wells and community water systems are located in the three valleys and would also be subject to contamination. Several municipalities, including the City of Healdsburg, use wells fed by the Russian River, which will contain contaminants that leach through the porous soils of the valleys.

9. What is "drinking water quality" anyway?

Our drinking water comes from surface water -- rivers, lakes, streams -- and from groundwater below us via wells. Water from all sources is subject to treatment, depending upon the types of contaminants present. Contaminants may be chemical or biological. Examples include lead, copper, MTBE, pesticides, nitrates, coliform bacteria and viruses.

The Safe Drinking Water Act directs the EPA to define acceptable levels of chemical and biological contaminants. Standards exist for 80 contaminants. The maximum contaminant levels are determined by a risk assessment process which takes into consideration how much water a typical person consumes in their lifetime, as well as risk of immediate threat to health. Water agencies test their water on a regular basis -- daily, weekly or monthly as appropriate to their water source and its known contaminants. Problems must be addressed and subjected to repeat testing.

10. What isn't drinking water?

As governed by the Safe Drinking Water Act, it is water that would cause immediate illness, or that has been determined to cause significant risk of long-term health problems. The definition of drinking water is subject to continuous updating. The EPA and a coalition of drinking water agencies continually research the risks of contaminants and their treatment. However, the EPA and other government agencies have a great challenge researching the number of new chemicals coming into production.

11. What is an "emerging contaminant?"

An upcoming concern is the detection of endocrine disruptors, substances that act like hormones, in our wastewater. New instrumentation has recently made the detection of these substances possible. The endocrine disruptors are emitted from the body after taking medications such as birth control pills, estrogen, etc. Other emerging contaminants currently being studied are labeled Personal Care Products (PPC's) and are compounds found in shampoos and cosmetics that tend to persist in the environment after treatment.

12. What's in the wastewater that would be used for NSCARP?

Given that Santa Rosa has found other methods to dispose of its wastewater, the source of wastewater for NSCARP is uncertain. However, in the case of Santa Rosa's wastewater, it contains significant levels of iron, copper, nickel and cyanide, probably a result of industrial waste, as well as high levels of nitrogen and phosphorous nutrients. It contains selenium close to levels toxic to fish, mercury close to levels toxic to humans, and boron close to levels toxic to grapevines. It also contains high levels of unidentified soluble organic contaminants as indicated by Total Organic Carbon of up to 60 mg/l. Certainly some of these organics are emerging contaminants.

13. How will this project affect the Russian River?

Recycled wastewater concentrated from the central cities of the county will leach through porous soils introducing contaminants into the river. This is on top of the impaired water quality due to cities and agriculture along the length of the river. Several studies have shown that some emerging contaminants, even in low concentrations of parts per trillion, have caused effects such as male fish taking on the sex characteristics of females.

14. Why is SCWA pursuing this project?

The Agency needs to demonstrate to state regulators that the county is doing its utmost to make use of current water supplies and thus gain approval for access to more surface and ground water. The Agency claims the purpose is to maintain river flows at mandated levels to provide habitat for threatened and endangered fish. If NSCARP is approved, SCWA can then sell more water to cities in Sonoma and Marin Counties.

15. How long would construction take?

Construction of the NSCARP project, if approved, would occur over a period of several years. Nineteen storage ponds must be excavated, sixteen pump stations must be constructed, and over one hundred and twelve miles of distribution pipelines would be laid under County roads. The narrow scenic roads of our County, leading to wineries and tasting rooms, as well as providing the only means of access to many communities, will be dug up. Traffic controls and large slow-moving construction vehicles will cause delays on all routes, as well as creating visual, noise, and air quality nuisances to tourists and residents alike. Furthermore, runoff during construction will increase sediment levels in the Russian River, making it less healthy for the very fish that SCWA purports to be protecting with this project.

