

EAST VERDE ESTATES | NITROGEN MANAGEMENT AREA FACT SHEET

SUMMARY

Groundwater, used as drinking water, in East Verde Estates has shown increasing nitrate levels over the last 20 years. Nitrate levels have exceeded the federal drinking water standard of 10 milligrams per liter in each of the Payson Water - East Verde Estates water system's groundwater wells. Too much nitrogen can harm people and the environment. In septic systems, nitrogen is present in the form of a substance called nitrate, and it can seep into groundwater and contaminate drinking water. High levels of nitrate can cause serious health problems for infants under six months old and can also damage rivers and lakes by fueling algae growth.

To protect customers in the short term, Payson Water - East Verde Estates has been providing water from an alternate drinking water source. For the long term, the utility is building a nitrate treatment system to ensure the water meets federal drinking water standards.

The Arizona Department of Environmental Quality (ADEQ) collected additional water samples from the drinking water system to help determine why nitrate levels increased in the drinking water system. These tests showed the presence of the artificial sweetener sucralose, which does not break down readily in the environment. When sucralose appears in groundwater, it indicates wastewater from septic systems, not farming or natural sources, is likely causing the contamination.

ADEQ's priority is protecting public health and the environment. Water Quality data collected by ADEQ identified a serious issue in East Verde Estates. We aim to lower risks for families and ensure residents have access to safe, reliable drinking water now and in the future. To protect public health and ensure access to clean drinking water, ADEQ is considering designating East Verde Estates as a Nitrogen Management Area (NMA). An NMA is a region designated by ADEQ where too much nitrogen from septic systems is entering the groundwater causing the water to be unsafe to drink without intervention. In an NMA, any new or replacement septic system must use nitrogen-reducing technology or connect to an available sewer system.

QUESTIONS AND ANSWERS

Why would ADEQ designate an area as an NMA?

ADEQ designates an area an NMA to protect community health and keep drinking water clean by reducing nitrogen pollution at its source. ADEQ may designate an area as an NMA when testing shows that nitrogen levels in groundwater or drinking water wells are too high.

In some communities, many homes use septic systems instead of public sewers. When these systems are too close together or are old and leaking, they can release more nitrogen than the ground can absorb. Over time, the wastewater can reach and contaminate the water people use for drinking. By designating an NMA, ADEQ can:

- Protect drinking water and reduce health risks for families, especially for babies
- Stop pollution before it spreads or becomes more expensive to clean up

What are the benefits of an NMA?

An NMA helps:

- Protect drinking water wells—both public and private
- Keep groundwater and surface water safe
- Maintain property values and community health
- Prevent expensive water treatment in the future

By addressing nitrogen at the source, NMAs make long-term water protection easier.

How is an NMA different from any other area with septic systems?

A designated NMA focuses specifically on reducing nitrogen pollution from septic systems in areas where groundwater is most at risk. In these areas, new or replacement septic systems must include nitrogen-reducing technology, and some properties may be required to connect to a nearby public sewer if one is available.

Can ADEQ remove or change an NMA once it's established?

Yes. ADEQ can amend or remove an NMA if new data show that groundwater quality has improved. Any change would follow a public process, including opportunities for community feedback.

What are the boundaries of the proposed NMA?

The proposed Payson Water - East Verde Estates NMA covers just under 100 acres known as the East Verde Estates Community, located approximately six miles northwest of the Town of Payson.

How would an NMA affect homeowners?

- New or replacement septic systems must use nitrogen-reducing technology
- Homeowners may need to connect to a sewer system if one becomes available
- Existing septic systems can stay in place unless they fail or are replaced

What happens next for East Verde Estates?

ADEQ has completed a Preliminary Designation Report and defined the proposed boundaries for the Payson Water - East Verde Estates NMA. The report has been shared with local leaders to brief them on the findings and gather feedback on possible solutions.

Next, ADEQ will publish a public notice announcing the proposed NMA designation. The public will then have 120 days to review the report and submit comments. Following that announcement, ADEQ will host a public meeting where residents can learn more, ask questions, and share input directly with ADEQ staff.

After the comment period ends, ADEQ will review all feedback. The ADEQ Director will then decide whether to formally designate East Verde Estates as an NMA or withdraw the proposal based on the data and community input. For more information about NMA visit azdeq.gov/nitrogen-management-areas