

WATER IS THE FIRST TEST

New Kent relies on a stressed aquifer while some cooling systems demand industrial-scale water.

1 DRINKING SUPPLY

County systems and private users depend heavily on the confined Potomac aquifer.

2 LIMITED CAPACITY

The 2026 DEQ study found little room for significant new industrial withdrawals.

3 BIG COOLING DEMAND

Evaporative or hybrid cooling can require hundreds of thousands of gallons daily.

4 LONG-TERM RISK

More pumping can worsen decline, subsidence, saltwater intrusion, and public cost.

The paper treats water availability as a threshold constraint, not a detail to resolve after approval.

NO WATER PROOF, NO PROJECT.

DEMAND MEETS PHYSICAL LIMITS

The issue is not just efficiency; it is whether a reliable supply exists without displacing others.

PROJECT DEMAND

- 600k-2M gal/day cited
- New groundwater well
- Expanded public supply
- Future water promise



AVAILABLE REALITY

- Large withdrawals failed models
- Severe permit hurdles
- Existing users share risk
- Prove non-groundwater source

A project should not be approved on water it may never be permitted to withdraw or the County cannot sustainably supply.

WATER CAPACITY IS A HARD LIMIT.

FOUR AQUIFER FACTS

The paper connects current state science with New Kent's public-supply and planning obligations.



New Kent is pursuing costly surface-water alternatives because the groundwater constraint already exists.

PROTECT THE SUPPLY WE ALREADY NEED.

THE CITIZEN 4x4

Four application requirements can place water reality at the beginning of the decision.

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| 01 | SCREEN FIRST | Treat groundwater capacity as an application-completeness and siting criterion. |
| 02 | PROVE SUPPLY | Require confirmed non-groundwater capacity or verified low-consumption cooling. |
| 03 | FUND REVIEW | Use independent hydrogeologic analysis paid by the applicant. |
| 04 | PROTECT USERS | Prevent new demand from shifting cost or risk to homes, farms, and public systems. |

The strongest decision is made before a water-dependent design becomes a sunk political and financial commitment.

DRINKING WATER COMES BEFORE COOLING WATER.