

Take Six Waters

Tap Report

Postcode area, UK

FY6

Basic description

Hard-leaning, calcium-led water from a Lake-District/Upland-reservoir-plus-river blend—made for al-dente pasta, paella-style rice, firm-crust lean breads, clear broths, crisp veg and roasties that keep their edges.

The science

Slightly hard - 9.24 °Clark

Converts to about 132 mg/L as CaCO_3 (Calcium Carbonate)

Ca $\approx$ 39 mg/L

Mg $\approx$ 8.4 mg/L

Alkalinity $\approx$ 72 mg/L as CaCO_3

Sulphate $\approx$ 79 mg/L

Sodium $\approx$ 28 mg/L

pH $\sim$ 7.4

Note on hardness

Different companies slice the hardness bands differently; by mg/L this sits in the “hard” camp even if the °Clark label reads “slightly hard.” The chemistry is internally consistent: $2.497 \times \text{Ca} + 4.118 \times \text{Mg} \approx$ your 132 mg/L hardness.

Where the water is from

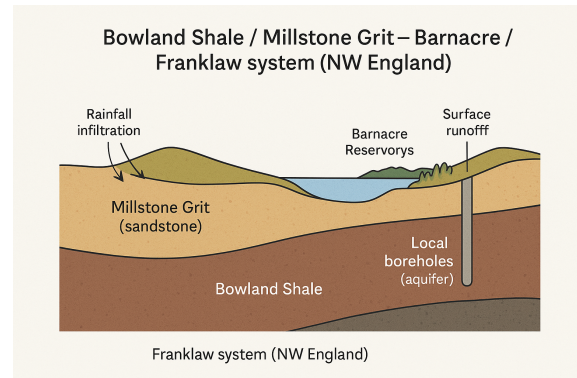
Barnacre is in the Franklaw system just north of Preston. Franklaw blends multiple sources: the Thirlmere Aqueduct from the Lake District, the Barnacre reservoirs (holding abstractions from the River Calder), local boreholes, and the River Wyre. That blend explains moderate alkalinity with a noticeable sulphate lean. Barnacre service reservoir sits in this network and has been part of the system design and incident history, which is why you’ll see it named in regulatory and engineering papers.

Underfoot, we’re talking Bowland Shale and Millstone Grit country—the Pennine sandstones and shales that give North-West UK uplands their fast runoff and low natural alkalinity. Mix that geology with river and borehole inputs and you get exactly the profile you see: calcium-forward hardness, modest magnesium, moderate buffer, and higher-than-average sulphate for the UK.

Now, the kitchen - what sings

Pasta

This is an al-dente machine. Calcium-led hardness and the sulphate tilt keep starch on the grain and rein in surface slimes. You’ll get firm centres and clean broth water that tastes of the pasta rather than paste.



Rice

Think paella and Calasparra/Bomba, not basmati. The same ions that make pasta snap help short- and medium-grain rices keep their architecture and drink stock without bursting. If you want fluffy basmati with long, separate needles, this isn't your optimal tap.

Dough

This water favours strength. Expect tighter crumb and good crust glass in lean wheat breads, rolls with chew, pretzels, ka'ak, bagels, and pizza styles that like backbone - like a New York slice. Fermentation runs steady rather than racing; gluten sets decisively. If you're chasing pillowy, milk-rich pan loaves, this water won't do you favours.

Boiling/ braising

Parboiled roasties keep their edges; braised beans and pulses hold skins - think whole beans with structure: chickpeas that stay intact in oil-and-stock braises, cannellini in a tomato-garlic stew, borlotti in a soffritto gravy, Greek-style gigantes/corona baked until creamy inside but still defined, flageolet alongside lamb, and black-eyed peas that keep their eye and a clean bite. Those all play to this water's strengths: clear liquor, tidy skins, distinct beans.

Poached pears sit up straight. For stocks, you'll get clear, bright broths with defined top notes; if your goal is ultra-gelatinous bone stock or fast seaweed-led umami extraction, softer water wins—that's a different tap.

Vegetables

For vegetables, it's the crispness side of the trade. Greens will stay snappy and cut clean, though the hardness can mute emerald brightness. If your brief is emerald-green haricots for the pass, use a softer build; if it's bite and structure, run the tap.

Coffee

For coffee (V60, filter), you're in a usable window without fussing. Alkalinity around 70 mg/L as CaCO_3 buffers acidity, magnesium in single digits nudges extraction, and calcium plus sulphate will lean the cup toward clarity and snap. Medium and darker roasts sing; ultra-delicate, high-acid coffees may taste a touch restrained. Let chlorinated aromas flash off with a pre-boil or a long bloom and you're set.

Grandma knows - the history bit

This area of Lancashire is famous for three perfect examples of water/ food marriage. FY6 water runs calcium-led with a steady buffer and a sulphate lean—exactly the sort of profile that keeps potatoes and pulses holding their shape and gives doughs a clean, decisive set. Lancashire hotpot is the obvious fit: slow lamb, onions and stock under potato slices that need to stay distinct rather than dissolving into stew; the dish's method counts on parboiled, firm-edged potatoes and a clear gravy, which this water quietly protects.

Butter pie (Preston's one-time Catholic Friday-fast potato-and-onion pie) sings for the same reason—the potato filling wants structure so the pastry can do the talking. Local memory puts it on chip-shop counters and football terraces; the starch stays tidy in a slow braise, then bakes without weeping.

Bonfire-night black peas - parched maple peas simmered forever with malt vinegar—are almost purpose-built for this tap. Harder, calcium-forward water resists the collapse you want for dal but is perfect when you're after skins that stay intact and a kernel that finally turns creamy. The legume literature is blunt: Ca/Mg slow cell separation and lengthen cooking time; great for whole-bean texture, not for purée. That's why your dal needs a softer build, but your parched peas repay patience in this water.

Geology notes

"Millstone Grit" here means hard Pennine sandstones (think coarse, quartz-rich sand turned to rock); "Bowland Shale" are organic-rich mudstones beneath. Together they shed soft, low-alkalinity upland water; rivers and boreholes add calcium, magnesium and sulphate on the way to your tap.

Primary references: Franklaw source blend and Barnacre system context (engineering and regulatory papers); regional geology (BGS).

Utility Company

United Utilities