Filed Pursuant to Rule 433 under the Securities Act Registration Statement No. 333-249702 Issuer Free Writing Prospectus dated October 20, 2022 CUSIP #: 63743HFF4

## NATIONAL RURAL UTILITIES COOPERATIVE FINANCE CORPORATION

## Medium-Term Notes, Series D With Maturities of Nine Months or More from Date of Issue

## Fixed Rate Notes

Issuer:	National Rural Utilities Cooperative Finance Corporation
Expected Ratings*:	A2 / A- / A (Moody's / S&P / Fitch)
Principal Amount:	\$500,000,000
Security Type:	Senior Unsecured
Interest Rate:	5.45%
Issue Price:	99.866% of Principal Amount
Trade Date:	October 20, 2022
Original Issue Date:	October 31, 2022 (T+7)
Maturity Date:	October 30, 2025
Benchmark Treasury:	4.250% due October 15, 2025
Benchmark Treasury Yield:	4.649%
Spread to Benchmark Treasury:	+85 basis points
Yield to Maturity:	5.499%
Interest Payment Dates:	Each April 30 and October 30, and the maturity date, commencing April 30, 2023
Optional Redemption:	The Company may redeem the notes at any time at its option, in whole or in part, at a "make-whole" redemption price equal to the greater of: (1)(a) the sum of the present values of the remaining scheduled payments of principal and interest thereon discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus 15 basis points less (b) interest accrued to the date of redemption, and (2) 100% of the principal amount of the notes to be redeemed, plus, in either case, accrued and unpaid interest thereon to, but excluding, the redemption date.
	<i>"Treasury Rate"</i> means, with respect to any redemption date, the yield determined by the Company in accordance with the following two paragraphs.
	The Treasury Rate shall be determined by the Company after 4:15 p.m., New York City time (or after such time as yields on U.S. government securities are posted daily by the Board of Governors of the Federal Reserve System), on the third business day preceding the redemption date based upon the yield or yields for the

most recent day that appear after such time on such day in the most recent statistical release published by the Board of Governors of the Federal Reserve System designated as "Selected Interest Rates (Daily) - H.15" (or any successor designation or publication) ("H.15") under the caption "U.S. government securities-Treasury constant maturities-Nominal" (or any successor caption or heading) ("H.15 TCM"). In determining the Treasury Rate, the Company shall select, as applicable: (1) the yield for the Treasury constant maturity on H.15 exactly equal to the period from the redemption date to the maturity date of the notes (the "Remaining Life"); or (2) if there is no such Treasury constant maturity on H.15 exactly equal to the Remaining Life, the two yields - one yield corresponding to the Treasury constant maturity on H.15 immediately shorter than and one yield corresponding to the Treasury constant maturity on H.15 immediately longer than the Remaining Life - and shall interpolate to the maturity date of the notes on a straight-line basis (using the actual number of days) using such yields and rounding the result to three decimal places; or (3) if there is no such Treasury constant maturity on H.15 shorter than or longer than the Remaining Life, the yield for the single Treasury constant maturity on H.15 closest to the Remaining Life. For purposes of this paragraph, the applicable Treasury constant maturity or maturities on H.15 shall be deemed to have a maturity date equal to the relevant number of months or years, as applicable, of such Treasury constant maturity from the redemption date.

If on the third business day preceding the redemption date H.15 TCM or any successor designation or publication is no longer published, the Company shall calculate the Treasury Rate based on the rate per annum equal to the semi-annual equivalent yield to maturity at 11:00 a.m., New York City time, on the second business day preceding such redemption date of the United States Treasury security maturing on, or with a maturity that is closest to, the maturity date of the notes, as applicable. If there is no United States Treasury security maturing on the maturity date of the notes but there are two or more United States Treasury securities with a maturity date equally distant from the maturity date of the notes, one with a maturity date preceding the maturity date of the notes and one with a maturity date following the maturity date of the notes, the Company shall select the United States Treasury security with a maturity date preceding the maturity date of the notes. If there are two or more United States Treasury securities maturing on the maturity date of the notes or two or more United States Treasury securities meeting the criteria of the preceding sentence, the Company shall select from among these two or more United States Treasury securities the United States Treasury security that is trading closest to par based upon the average of the bid and asked prices for such United States Treasury securities at 11:00 a.m., New York City time. In determining the Treasury Rate in accordance with the terms of this paragraph, the semi-annual yield to maturity of the applicable United States Treasury security shall be based upon the average of the bid and asked prices (expressed as a percentage of principal amount) at 11:00 a.m., New York City time, of such United States Treasury security, and rounded to three decimal places.

Payment at Maturity:	The payment at maturity will be 100% of the Principal Amount plus accrued and unpaid interest, if any
Basis:	As Principal
Agents:	PNC Capital Markets LLC RBC Capital Markets, LLC Scotia Capital (USA) Inc. U.S. Bancorp Investments, Inc.

KeyBanc Capital Markets Inc.

## Mizuho Securities USA LLC MUFG Securities Americas Inc. Regions Securities LLC Truist Securities, Inc.

Form of Note: (Book-Entry or Certificated)	Book-Entry
Denominations:	\$2,000 x \$1,000
Other Terms:	None

\* Note: A securities rating is not a recommendation to buy, sell, or hold securities and may be subject to revision or withdrawal at any time.

Concurrently with this offering, we are also offering \$350,000,000 aggregate principal amount of Collateral Trust Bonds (the "other securities"), pursuant to a separate prospectus supplement. Although we expect that the sales of the notes offered hereby and the other securities will take place concurrently, the sales are not conditioned upon each other, and we may consummate the sale of one or more issues and not the other(s), or consummate the sales at different times.

It is expected that delivery of the notes will be made against payment therefor on or about October 31, 2022 which is the seventh trading day following the date hereof (such settlement cycle being referred to as T+7). Purchasers of notes should note that the ability to settle secondary market trades of the notes effected on the date of pricing or the next four succeeding business days may be affected by the T+7 settlement. Accordingly, purchasers who wish to trade the notes on the date of pricing or the next four succeeding business days will be required to specify an alternative settlement cycle at the time of any such trade to prevent a failed settlement and should consult their own legal advisors.

The issuer has filed a registration statement (including a prospectus) with the U.S. Securities and Exchange Commission (SEC) for this offering. Before you invest, you should read the prospectus for this offering in that registration statement, and other documents the issuer has filed with the SEC for more complete information about the issuer and this offering. You may get these documents for free by searching the SEC online database (EDGAR®) at www.sec.gov. Alternatively, you may obtain a copy of the prospectus from PNC Capital Markets LLC by calling toll-free at 1-855-881-0697, RBC Capital Markets, LLC by calling toll-free at 1-866-375-6829, Scotia Capital (USA) Inc. by calling toll-free at 1-800-372-3930 or U.S. Bancorp Investments, Inc. by calling toll-free at 1-877-558-2607.