

Prospectus Supplement

John Hancock Funds II Floating Rate Income Fund (the fund)

Supplement dated January 31, 2025 to the current Summary Prospectus, as may be supplemented (the Summary Prospectus)

Effective January 31, 2025 (the Effective Date), Dan Shugrue is added as a portfolio manager of the fund. As of the Effective Date, Grayson Allison, Andrew Carlino, Kim Harris, and Nate Whittier will continue as portfolio managers of the fund, and together with Dan Shugrue will be jointly and primarily responsible for the day-to-day management of the fund's portfolio.

As of the Effective Date, the following information will be added under the heading "Portfolio management" in the "Fund summary" section for the fund:

Dan Shugrue

Partner and Portfolio Manager Managed the fund since 2025

In addition, as of December 31, 2025, Andrew Carlino and Kim Harris will no longer serve as portfolio managers for the fund. Accordingly, all references to Mr. Carlino and Ms. Harris will be removed from the Summary Prospectus as of December 31, 2025.

You should read this supplement in conjunction with the Summary Prospectus and retain it for your future reference.



Summary prospectus

John Hancock Floating Rate Income Fund

Before you invest, you may want to review the fund's prospectus, which contains more information about the fund and its risks. You can find the fund's prospectus and other information about the fund, including the Statement of Additional Information and most recent reports, online at www.jhinvestments.com/prospectuses. You can also get this information at no cost by calling 800-225-5291 (Class A and Class C) or 888-972-8696 (Class I and Class R6) or by sending an email request to info@jhinvestments.com. The fund's prospectus and Statement of Additional Information, both dated January 1, 2025, as may be supplemented, and most recent financial highlights information included in the shareholder report, dated August 31, 2024, are incorporated by reference into this summary prospectus.

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A: JFIAX C: JFIGX I: JFIIX R6: JFIRX

Investment objective

To seek a high level of current income.

Fees and expenses

This table describes the fees and expenses you may pay if you buy, hold, and sell shares of the fund. **You may pay other fees, such as brokerage commissions and other fees to financial intermediaries, which are not reflected in the tables and examples below.** You may qualify for sales charge discounts on Class A shares if you and your family invest, or agree to invest in the future, at least \$100,000 in the John Hancock family of funds. Intermediaries may have different policies and procedures regarding the availability of front-end sales charge waivers or contingent deferred sales charge (CDSC) waivers (See Appendix 1 - Intermediary sales charge waivers, which includes information about specific sales charge waivers applicable to the intermediaries identified therein). More information about these and other discounts is available from your financial professional and beginning on page 23 of the prospectus under "Sales charge reductions and waivers" or page 144 of the fund's Statement of Additional Information under "Sales Charges on Class A and Class C Shares."

Shareholder fees (%) (fees paid directly from your investment)	Α	С	I	R6
Maximum front-end sales charge (load) on purchases, as a % of purchase price	2.50	None	None	None
Maximum deferred sales charge (load) as a % of purchase or sale price, whichever is less	0.50 (on certain purchases, including those of \$250,000 or more)	1.00	None	None
Small account fee (for fund account balances under \$1,000) (\$)	20	20	None	None

Annual fund operating expenses (%) (expenses that you pay each year as a percentage of the value of your investment)	Α	С	1	R6
Management fee	0.68	0.68	0.68	0.68
Distribution and service (Rule 12b-1) fees	0.25	1.00	0.00	0.00
Other expenses	0.221	0.221	0.22^{1}	0.11^{1}
Acquired fund fees and expenses	0.02 ²	0.022	0.02^{2}	0.02^{2}
Total annual fund operating expenses	1.17 ³	1.92 ³	0.92 ³	0.813
Contractual expense reimbursement	-0.144	-0.144	-0.12 ⁴	-0.124
Total annual fund operating expenses after expense reimbursements	1.03	1.78	0.80	0.69

- 1 "Other expenses" reflect interest expense and/or borrowing costs resulting from the fund's use of certain investments. Such expense is required to be treated as a fund expense for accounting purposes. Any interest expense and/or borrowing cost amount will vary based on the fund's use of those investments as an investment strategy. During the fiscal year ending August 31, 2024, the interest expense and/or borrowing costs amounted to 0.03% of the fund's average daily net assets.
- 2 "Acquired fund fees and expenses" are based on indirect net expenses associated with the fund's investments in underlying investment companies.
- 3 The "Total annual fund operating expenses" shown may not correlate to the fund's ratios of expenses to average daily net assets shown in the "Financial highlights" section of the fund's prospectus, which does not include "Acquired fund fees and expenses."
- 4 The advisor contractually agrees to reduce its management fee or, if necessary, make payment to the fund in an amount equal to the amount by which expenses of the fund exceed 0.64% of average daily net assets of the fund and expenses of Class A, Class C, Class I, and Class R6 shares, as applicable, exceed 0.98%, 1.73%, 0.75%, and 0.64%, respectively, of average daily net assets attributable to the applicable class. For purposes of these agreements, "expenses of the fund" means all fund expenses, excluding (a) taxes, (b) brokerage commissions, (c) interest expense, (d) litigation and indemnification expenses and other extraordinary expenses not incurred in the ordinary course of the fund's business, (e) class-specific expenses, (f) borrowing costs, (g) prime brokerage fees, (h) acquired fund fees and expenses paid indirectly, and (i) short dividend expense, and "expenses of Class A, Class C, Class I, and Class R6 shares" means all "expenses of the fund" attributable to the applicable class plus class-specific expenses. Each agreement expires on December 31, 2025 unless renewed by mutual agreement of the fund and the advisor based upon a determination that this is appropriate under the circumstances at that time. The advisor also contractually agrees to waive a portion of its management fee

and/or reimburse expenses for the fund and certain other John Hancock funds according to an asset level breakpoint schedule that is based on the aggregate net assets of all the funds participating in the waiver or reimbursement, including the fund (the participating portfolios). This waiver equals, on an annualized basis, 0.0100% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$75 billion but is less than or equal to \$125 billion; 0.0125% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$125 billion but is less than or equal to \$150 billion; 0.0150% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$150 billion but is less than or equal to \$175 billion; 0.0175% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$175 billion but is less than or equal to \$200 billion; 0.0200% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$200 billion but is less than or equal to \$225 billion; 0.0225% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$200 billion but is less than or equal to \$225 billion; and 0.0225% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$200 billion. The amount of the reimbursement is calculated daily and allocated among all the participating portfolios in proportion to the daily net assets of each participating portfolio. During its most recent fiscal year, the fund's reimbursement amounted to 0.01% of the fund's average daily net assets. This agreement expires on July 31, 2026, unless renewed by mutual agreement of the fund and the advisor based upon a determination that this is appropriate under the circumstances at that time.

Expense example

This example is intended to help you compare the cost of investing in the fund with the cost of investing in other mutual funds. Please see below a hypothetical example showing the expenses of a \$10,000 investment for the time periods indicated and then, except as shown below, assuming you sell all of your shares at the end of those periods. The example assumes a 5% average annual return and that fund expenses will not change over the periods. Although your actual costs may be higher or lower, based on these assumptions, your costs would be:

	Shares Sold						
Expenses (\$)		Α	С	I	R6	С	
1 year		352	281	82	70	181	
3 years		599	590	281	247	590	
5 years		864	1,024	498	438	1,024	
10 years		1,623	2,037	1,120	991	2,037	

Portfolio turnover

The fund pays transaction costs, such as commissions, when it buys and sells securities (or "turns over" its portfolio). A higher portfolio turnover rate may indicate higher transaction costs and may result in higher taxes when fund shares are held in a taxable account. These costs, which are not reflected in annual fund operating expenses or in the example, affect the fund's performance. During its most recent fiscal year, the fund's portfolio turnover rate was 51% of the average value of its portfolio.

Principal investment strategies

Under normal market conditions, the fund will invest at least 80% of its net assets (plus any borrowings for investment purposes) in floating-rate loans, which often include debt securities of domestic and foreign issuers that are rated below investment grade (rated below Baa by a nationally recognized statistical rating organization such as Moody's Investors Service, Inc. or BBB by S&P Global Ratings), at the time of purchase, or are of comparable quality, as determined by the manager, and other floating-rate securities. Bonds that are rated at or below BB by S&P Global Ratings or Ba by Moody's Investors Service, Inc. are considered junk bonds.

The fund may invest in domestic and foreign loans and loan participations that pay interest at rates that float or reset periodically at a margin above a generally recognized base lending rate such as the Prime Rate, the Secured Overnight Financing Rate (SOFR), or another generally recognized base lending rate. Loans and debt instruments rated below investment grade are considered speculative. The fund may invest in loans of companies whose financial conditions are troubled or uncertain and that may be involved in bankruptcy proceedings, reorganizations, or financial restructurings. Some loans may be illiquid. The fund may also acquire and hold warrants and other equity interests. The fund may invest in loans, loan participations, and other securities of any maturity and duration. The fund may also invest in loans of any aggregate principal amount, which will vary from time to time.

For purposes of reducing risk and/or improving liquidity, the fund may invest in derivative instruments such as options (including options on securities indexes) and swaps (including credit default swaps).

The fund may invest in any number of issuers and may, at times, invest its assets in a small number of issuers. The fund may focus its investments in a particular sector or sectors of the economy. The fund's investment process may result in a higher-than-average portfolio turnover ratio.

Principal risks

An investment in the fund is not a bank deposit and is not insured or guaranteed by the Federal Deposit Insurance Corporation or any other government agency. Many factors affect performance, and fund shares will fluctuate in price, meaning you could lose money. The fund's investment strategy may not produce the intended results.

The fund's main risks are listed below in alphabetical order, not in order of importance. Before investing, be sure to read the additional descriptions of these risks beginning on page 6 of the prospectus.

Changing distribution levels risk. The fund may cease or reduce the level of its distribution if income or dividends paid from its investments declines.

Credit and counterparty risk. The issuer or guarantor of a fixed-income security, the counterparty to an over-the-counter derivatives contract, or a borrower of fund securities may not make timely payments or otherwise honor its obligations. A downgrade or default affecting any of the fund's securities could affect the fund's performance.

Distressed investments risk. Distressed investments, including loans, mortgages, bonds, and notes, may not be publicly traded and may involve substantial risk. A fund may lose up to its entire investment.

Economic and market events risk. Events in the U.S. and global financial markets, including actions taken by the U.S. Federal Reserve or foreign central banks to stimulate or stabilize economic growth, may at times result in unusually high market volatility, which could negatively impact performance. Reduced liquidity in credit and fixed-income markets could adversely affect issuers worldwide. Banks and financial services companies could suffer losses if interest rates rise or economic conditions deteriorate.

Equity securities risk. The price of equity securities may decline due to changes in a company's financial condition or overall market conditions.

Fixed-income securities risk. A rise in interest rates typically causes bond prices to fall. The longer the average maturity or duration of the bonds held by a fund, the more sensitive it will likely be to interest-rate fluctuations. An issuer may not make all interest payments or repay all or any of the principal borrowed. Changes in a security's credit quality may adversely affect fund performance.

Floating rate loans risk. Floating rate loans are generally rated below investment-grade and are generally considered speculative because they present a greater risk of loss, including default, than higher quality debt instruments.

Foreign securities risk. Less information may be publicly available regarding foreign issuers, including foreign government issuers. Foreign securities may be subject to foreign taxes and may be more volatile than U.S. securities. Currency fluctuations and political and economic developments may adversely impact the value of foreign securities.

Hedging, derivatives, and other strategic transactions risk. Hedging, derivatives, and other strategic transactions may increase a fund's volatility and could produce disproportionate losses, potentially more than the fund's principal investment. Risks of these transactions are different from and possibly greater than risks of investing directly in securities and other traditional instruments. Under certain market conditions, derivatives could become harder to value or sell and may become subject to liquidity risk (i.e., the inability to enter into closing transactions). Derivatives and other strategic transactions that the fund intends to utilize include: credit default swaps, options, and swaps. Options and swaps generally are subject to counterparty risk. In addition, swaps may be subject to interest-rate and settlement risk, and the risk of default of the underlying reference obligation.

High portfolio turnover risk. Trading securities actively and frequently can increase transaction costs (thus lowering performance) and taxable distributions.

Illiquid and restricted securities risk. Illiquid and restricted securities may be difficult to value and may involve greater risks than liquid securities. Illiquidity may have an adverse impact on a particular security's market price and the fund's ability to sell the security.

Interest-rate risk. Fixed-income securities are affected by changes in interest rates. When interest rates decline, the market value of fixed-income securities generally can be expected to rise. Conversely, when interest rates rise, the market value of fixed-income securities generally can be expected to decline. The longer the duration or maturity of a fixed-income security, the more susceptible it is to interest-rate risk.

LIBOR discontinuation risk. The official publication of the London Interbank Offered Rate (LIBOR), which many debt securities, derivatives and other financial instruments traditionally utilized as the reference or benchmark rate for interest rate calculations, was discontinued as of June 30, 2023. However, a subset of LIBOR settings was published on a "synthetic" basis until September 30, 2024. The discontinuation of LIBOR and a transition to replacement rates may lead to volatility and illiquidity in markets and may adversely affect the fund's performance.

Liquidity risk. The extent (if at all) to which a security may be sold or a derivative position closed without negatively impacting its market value may be impaired by reduced market activity or participation, legal restrictions, or other economic and market impediments. Liquidity risk may be magnified in rising interest rate environments due to higher than normal redemption rates. Widespread selling of fixed-income securities to satisfy redemptions during periods of reduced demand may adversely impact the price or salability of such securities. Periods of heavy redemption could cause the fund to sell assets at a loss or depressed value, which could negatively affect performance. Redemption risk is heightened during periods of declining or illiquid markets.

Loan participations risk. Participations and assignments involve special types of risks, including credit risk, interest-rate risk, counterparty risk, liquidity risk, risks associated with extended settlement, and the risks of being a lender.

Lower-rated and high-yield fixed-income securities risk. Lower-rated and high-yield fixed-income securities (junk bonds) are subject to greater credit quality risk, risk of default, and price volatility than higher-rated fixed-income securities, may be considered speculative, and can be difficult to resell.

Operational and cybersecurity risk. Cybersecurity breaches may allow an unauthorized party to gain access to fund assets, customer data, or proprietary information, or cause a fund or its service providers to suffer data corruption or lose operational functionality. Similar incidents affecting issuers of a fund's securities may negatively impact performance. Operational risk may arise from human error, error by third parties, communication errors, or technology failures, among other causes.

Sector risk. When a fund focuses its investments in certain sectors of the economy, its performance may be driven largely by sector performance and could fluctuate more widely than if the fund were invested more evenly across sectors.

Small number of issuers risk. Adverse events affecting a particular issuer or group of issuers may magnify losses for funds which may invest a large portion of assets in any one issuer or a small number of issuers.

Warrants risk. The prices of warrants may not precisely reflect the prices of their underlying securities. Warrant holders do not receive dividends or have voting or credit rights. A warrant ceases to have value if not exercised prior to its expiration date.

Past performance

The following information illustrates the variability of the fund's returns and provides some indication of the risks of investing in the fund by showing changes in the fund's performance from year to year and by showing how the fund's average annual returns compared with a broad-based securities market index. Past performance (before and after taxes) does not indicate future results. The Morningstar LSTA US Leveraged Loan Index shows how the fund's performance compares against the returns of similar investments. All figures assume dividend reinvestment. Performance information is updated daily, monthly, and quarterly and may be obtained at our website, jhinvestments.com, or by calling 800-225-5291 (Class A and Class C), Monday to Thursday, 8:00 A.M.—7:00 P.M., and Friday, 8:00 A.M.—6:00 P.M., Eastern time, or 888-972-8696 (Class I and Class R6) between 8:30 A.M. and 5:00 P.M., Eastern time, on most business days.

A note on performance

Prior to August 30, 2018, the fund was managed by a different subadvisor pursuant to different investment strategies, and thus, the performance presented prior to this date should not be attributed to the current subadvisor. The fund's performance shown below might have differed materially had the current subadvisor managed the fund prior to August 30, 2018.

Please note that after-tax returns (shown for Class A shares only) reflect the highest individual federal marginal income-tax rate in effect as of the date provided and do not reflect any state or local taxes. Your actual after-tax returns may be different. After-tax returns are not relevant to shares held in an IRA, 401(k), or other tax-advantaged investment plan. After-tax returns for other share classes would vary. The returns for Class A shares have been adjusted to reflect the reduction in the maximum sales charge from 3.00% to 2.50%, effective February 3, 2014.

Calendar year total returns (%)—Class A (sales charges are not reflected in the bar chart and returns would have been lower if they were)

2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
-0.35	-4.37	10.94	2.71	-1.12	8.79	2.65	4.70	-4.24	13.30
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				<u>—</u>					
									
			02.2	004	6.41%				
r-to-date to	tal return throu	gh:	Q3 2	J24	0.41/0				
ar-to-date to st quarter:	tal return throu	gh:	Q3 20 Q2 20		9.85%				

Average annual total returns (%)—as of 12/31/2023	1 year	5 year	10 year
Class A (before tax)	10.45	4.33	2.88
after tax on distributions	6.64	1.96	0.71
after tax on distributions, with sale	6.08	2.28	1.20
Class C	11.44	4.09	2.38
Class I	13.56	5.09	3.40
Class R6	13.83	5.25	3.53
Bloomberg U.S. Aggregate Bond Index (reflects no deduction for fees, expenses, or taxes) ¹	5.53	1.10	1.81

¹ The fund has designated the Bloomberg U.S. Aggregate Bond Index as its new broad-based securities market index in accordance with the revised definition for such an index.

Investment management

Investment advisor John Hancock Investment Management LLC Subadvisor BCSF Advisors, LP (Bain Capital Credit)

Morningstar LSTA US Leveraged Loan Index (reflects no deduction for fees, expenses, or taxes)

Portfolio management

The following individuals are jointly and primarily responsible for the day-to-day management of the fund's portfolio.

Grayson AllisonPartner and Portfolio Manager
Managed the fund since 2025

Andrew CarlinoPartner and Portfolio Manager
Managed the fund since 2018

Kim HarrisPartner and Portfolio Manager
Managed the fund since 2018

Nate WhittierPartner and Portfolio Manager
Managed the fund since 2019

5.80

4 42

13.13

Purchase and sale of fund shares

The minimum initial investment requirement for Class A and Class C shares is \$1,000 (\$250 for group investments), except that there is no minimum for certain group retirement plans, certain fee-based or wrap accounts, or certain other eligible investment product platforms. The minimum initial investment requirement for Class I shares is \$250,000, except that the fund may waive the minimum for any category of investors at the fund's sole discretion. The minimum initial investment requirement for Class R6 shares is \$1 million, except that there is no minimum for: qualified and nonqualified plan investors; certain eligible qualifying investment product platforms; Trustees, employees of the advisor or its affiliates, employees of the subadvisor, members of the fund's portfolio management team and the spouses and children (under age 21) of the aforementioned. There are no subsequent minimum investment requirements.

Class A, Class C, Class I and Class R6 shares may be redeemed on any business day by mail: John Hancock Signature Services, Inc., P.O. Box 219909, Kansas City, MO 64121-9909; or for most account types through our website: jhinvestments.com; or by telephone: 800-225-5291 (Class A and Class C); 888-972-8696 (Class I and Class R6).

John Hancock Floating Rate Income Fund

Taxes

The fund's distributions are taxable, and will be taxed as ordinary income and/or capital gains, unless you are investing through a tax-deferred arrangement, such as a 401(k) plan or individual retirement account. Withdrawals from such tax-deferred arrangements may be subject to tax at a later date.

Payments to broker-dealers and other financial intermediaries

If you purchase the fund through a broker-dealer or other financial intermediary (such as a bank, registered investment advisor, financial planner, or retirement plan administrator), the fund and its related companies may pay the broker-dealer or other intermediary for the sale of fund shares and related services. These payments may create a conflict of interest by influencing the broker-dealer or other intermediary and your salesperson to recommend the fund over another investment. These payments are not applicable to Class R6 shares. Ask your salesperson or visit your financial intermediary's website for more information.



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