

Summary prospectus

John Hancock California Municipal Bond 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 October 1, 2024, as may be supplemented, and most recent financial highlights information included in the shareholder report, dated May 31, 2024, are incorporated by reference into this summary prospectus.

Tickers

A: TACAX C: TCCAX I: JCAFX R6: JCSRX

Investment objective

To seek a high level of current income, consistent with preservation of capital, that is exempt from federal and California personal income taxes.

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 21 of the prospectus under "Sales charge reductions and waivers" or page 113 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	- 1	R6
Maximum front-end sales charge (load) on purchases, as a % of purchase price	4.00	None	None	None
Maximum deferred sales charge (load) as a % of purchase or sale price, whichever is less	1.00 (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	ı	R6		
Management fee	0.51	0.51	0.51	0.51		
Distribution and service (Rule 12b-1) fees	0.15	1.00	0.00	0.00		
Other expenses	0.23 ^{1,2}	$0.23^{1,2}$	0.231,2	0.16^{1}		
Acquired fund fees and expenses	0.02 ³	0.02^{3}	0.02^{3}	0.02^{3}		
Total annual fund operating expenses	0.914	1.764	0.764	0.69 ⁴		
Contractual expense reimbursement	-0.17 ⁵	-0.27 ^{5,6}	-0.17 ⁵	-0.17 ⁵		
Total annual fund operating expenses after expense reimbursements	0.74	1.49	0.59	0.52		

- 1 Includes interest expenses in the amount of 0.06%.
- 2 "Other expenses" have been restated from fiscal year amounts to reflect current fees and expenses.
- 3 "Acquired fund fees and expenses" are based on indirect net expenses associated with the fund's investments in underlying investment companies.
- 4 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."
- 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 0.43% of average daily net assets of the fund. For purposes of this agreement, "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. This agreement expires on September 30, 2025, unless renewed by mutual agreement of the advisor and the fund 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; and 0.0225% of that portion of the aggregate net assets of all the participating portfolios that exceeds \$225 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

6 The distributor contractually agrees to limit its Rule 12b-1 fees for Class C shares to 0.90%. This agreement expires on September 30, 2025, unless renewed by mutual agreement of the fund and the distributor 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	473	252	60	53	152	
3 years	662	528	226	204	528	
5 years	868	929	406	367	929	
10 years	1,460	1,826	926	843	1,826	

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 44% of the average value of its portfolio.

Principal investment strategies

Under normal market conditions, the fund invests at least 80% of its net assets, plus amounts borrowed for investment purposes, in securities of any maturity exempt from federal and California personal income taxes. Most of these securities are investment-grade when purchased, but the fund may invest up to 20% of its net assets in junk bonds rated BB by S&P Global Ratings (S&P) or Fitch Ratings, Inc. (Fitch Ratings) or Ba by Moody's Investors Service, Inc. (Moody's), or their unrated equivalents. The fund's investment policies are based on credit ratings at the time of purchase.

The fund may buy bonds of any maturity. The fund may engage in derivative transactions. Derivatives may be used to reduce risk and/or enhance investment returns, and may include futures contracts on debt securities and debt securities indexes; options on futures, debt securities, and debt indexes; and inverse floating-rate securities. The fund may also use tender option bond transactions to seek to enhance potential gains. The fund will look through to the underlying municipal bonds held by a tender option bond trust for purposes of the fund's 80% policy. The fund may leverage its assets through the use of proceeds received as a result of tender option bond transactions. The fund may contribute up to 15% of its holdings in municipal securities to tender option bond transactions.

The manager looks for undervalued bonds, based on both broad and security-specific factors, such as issuer creditworthiness, bond structure, and general credit trends, and uses detailed analysis of an appropriate index to model portfolio performance and composition.

The fund may invest in general obligation bonds, however, in general, the manager favors bonds backed by revenue from a specific public project or facility, such as a power plant (revenue bonds), as they tend to offer higher yields than general obligation bonds. The manager also favors bonds that have limitations on early payoff (call protection), which can help minimize the potential effect of falling interest rates on the fund's yield. The manager may implement short-term trading strategies to take advantage of pricing imbalances within the municipal bond market. To the extent that the fund invests in bonds that are subject to the alternative minimum tax (AMT), the income paid by the fund may not be entirely tax-free to all investors. Investments in bonds subject to the AMT will not be counted toward the fund's 80% investment policy.

For liquidity and flexibility, the fund may invest up to 20% of its net assets (plus any borrowings for investment purposes) in taxable and tax-free investment-grade short-term securities.

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.

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.

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.

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: futures contracts; inverse floating-rate securities; options on futures; and options. Futures contracts and options generally are subject to counterparty risk.

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

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. The secondary market for certain tax-exempt securities tends to be less well-developed or liquid than many other securities markets, which may result in increased volatility or liquidity risk.

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.

Municipal bond risk. The prices of municipal bonds, including general obligation bonds, can decline if the issuer's credit quality declines. Revenue bond prices can decline if related projects become unprofitable. An insured municipal bond is subject to the risk that the insurer may be unable to pay claims and is not insured with respect to the market value of the obligation. Municipal bond income could become taxable in the future. Investments in bonds subject to the alternative minimum tax may result in tax liability for shareholders.

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.

State/region risk. Investing heavily in any one state or region increases exposure to losses in that state or region. This risk is magnified for a fund that invests mainly in bonds from a single state. Factors that may affect performance include economic or political changes, tax base erosion, state constitutional limits on tax increases, budget deficits and other financial difficulties, and changes in credit ratings. At times, California has been more economically volatile than the United States as a whole. Puerto Rican municipal obligations, in which the fund may invest, may be subject to further devaluation due to adverse political, economic, and market conditions.

Tender option bonds risk. The fund's participation in tender option bond transactions may increase volatility and/or reduce the fund's returns. Tender option bond transactions create leverage. Leverage magnifies returns, both positive and negative, and risk by magnifying the volatility of returns. An investment in a tender option bond transaction typically involves greater risk than investing in the underlying municipal fixed rate bonds, including the risk of loss of principal.

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 Bloomberg California Municipal Bond 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

Class A, Class I, and Class R6 shares commenced operations on December 29, 1989, February 13, 2017, and August 30, 2017, respectively. Returns shown prior to a class's commencement date are those of Class A shares, except that they do not include sales charges and would be lower if they did. Returns for Class I and Class R6 shares would have been substantially similar to returns of Class A shares because each share class is invested in the

same portfolio of securities and returns would differ only to the extent that expenses of the classes are different. To the extent expenses of a class would have been higher than expenses of Class A shares for the periods shown, performance would have been lower.

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 4.50% to 4.00%, 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
11.18	3.18	-0.01	6.10	0.42	7.44	3.69	2.53	-8.65	8.22
ear-to-date tot	al return throu	gh:	Q2 2	024	0.92%				
ar-to-date tot est quarter:	al return throu	gh:	Q2 2 Q4 2		0.92%				

Average annual total returns (%)—as of 12/31/2023	1 year	5 year	10 year
Class A (before tax)	3.91	1.63	2.86
after tax on distributions	3.90	1.53	2.79
after tax on distributions, with sale	3.65	1.93	2.95
Class C	6.30	1.68	2.49
Class I	8.27	2.60	3.38
Class R6	8.39	2.64	3.39
Bloomberg Municipal Bond Index (reflects no deduction for fees, expenses, or taxes) ¹	6.40	2.25	3.03
Bloomberg California Municipal Bond Index (reflects no deduction for fees, expenses, or taxes)	6.22	2.25	3.10

¹ The fund has designated the Bloomberg Municipal 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 Manulife Investment Management (US) LLC

Portfolio management

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

Dennis DiCiccoPortfolio Manager

Managed the fund since 2018

Adam A. Weigold, CFASenior Portfolio Manager, Head of Municipal Bonds
Managed the fund since 2021

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).

Taxes

The fund intends to distribute tax-exempt income. The fund intends to meet certain federal tax requirements so that distributions of the tax-exempt interest it earns may be treated as exempt-interest dividends. A portion of the fund's exempt-interest dividends is also expected to be exempt from California personal income taxation when received by individual shareholders of the fund who are subject to California personal income taxation. A portion of the fund's distributions may, however, be subject to federal income tax.

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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