

Water and Wastewater Projects



Financing with Tax-Exempt Bonds

STEPHEN A. SPITZ
and **DEVIN BRENNAN**



ABOUT THE AUTHORS:

Stephen A. Spitz, a partner in the San Francisco office of Orrick, Herrington & Sutcliffe LLP, is a member of the Public Finance Department. Mr. Spitz has served as bond counsel, disclosure counsel and underwriter's counsel for a wide variety of water and wastewater financings. He also has substantial experience and expertise in interest rate swaps and swap based products in the municipal market.

Devin Brennan, a managing associate in the San Francisco office of Orrick, Herrington & Sutcliffe LLP, is a member of the Public Finance Department. Mr. Brennan has served as bond counsel and disclosure counsel on a number of water and wastewater financings for public utilities, irrigation districts and other local agencies. He also has experience in municipal market restructurings, workouts and bankruptcy.

DISCLAIMER: Nothing in this booklet should be construed or relied upon as legal advice. Instead, this booklet is intended to serve as a general introduction to the subject of disclosure obligations of issuers of municipal securities.

Published by Orrick, Herrington & Sutcliffe LLP

All rights reserved.

Copyright © 2012 by Orrick, Herrington & Sutcliffe LLP

No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any information storage and retrieval system, without permission in writing from the publisher.

Water and Wastewater Projects: Financing with Tax-Exempt Bonds

STEPHEN A. SPITZ
and **DEVIN BRENNAN**



WWW.ORRICK.COM

Table of Contents

	Introduction	1
CHAPTER 1	Why Bonds?	2
	Debt Financing vs. Pay-as-you-go	2
	Tax-Exempt Bonds	3
CHAPTER 2	Enterprise Revenue Borrowing	5
	Project Finance or System Finance?	5
	Security for Enterprise Debt	8
	Additional Debt Tests	20
	Rate Stabilization	23
	Short-Term Financings	25
	Alternatives to Revenue Secured Debt	27
CHAPTER 3	Types of Debt Instruments	31
	Authority to Incur Debt	31
	Enterprise Financings: Revenue Bonds and Installment Sale Agreements	35
	Lease Financings: Lease Revenue Bonds and Certificates of Participation	40
	Intergovernmental Borrowings	42
	Variable-Rate Debt	42
	Credit Enhancement	45
CHAPTER 4	The Financing Process	47
	The Financing Team	47
	Negotiated Sale or Competitive Sale?	51
	Financing Documents	53
	Document Preparation and Approval	57
	Ratings	58
	Sale and Closing	59
	Private Placements and Direct Loans	60
CHAPTER 5	Federal Tax Law Considerations	61
	Capital Expenditure Financings	62
	Operating Agreements	63
	Reimbursement of Prior Expenditures	65
	Cash Flow Borrowings	66
	Issue Sizing and Term	67
	Arbitrage Limitations	68
	Arbitrage Rebate	69
	Tax Risks	72
	The Role of Bond Counsel	72

CHAPTER 6 Securities Law Requirements73
Federal Securities Law 74
The Official Statement 77
Continuing Disclosure. 78

CHAPTER 7 Acquisition of Treatment Capacity and Water Supply 80
Water and Wastewater Treatment Capacity 80
Acquisition of Water Supply.81

CHAPTER 8 Refunding of Outstanding Debt82
Statutory Authority 83
Defeasance Mechanics. 83
Federal Tax Law Considerations. 84
Evaluating Saving in an Advance Refunding Transaction 85

CHAPTER 9 Financings Involving Private Companies. 86
Design/Build Projects. 86
Concession or Operating Agreements. 87
Tax-Exempt Bonds for Private Water Companies 88
Project Financing; Desalination Projects.91

Contact Information92

INTRODUCTION

Managers of water and wastewater utilities face complex financial challenges. The purpose of this guidebook is to provide an overview of issues relating to the financing of water and wastewater projects in general and financing with obligations the interest on which is excluded from gross income for federal income tax purposes (referred to herein as “tax-exempt bonds”) in particular. Although tax-exempt bonds are generally issued by or for a municipal entity or a department of a municipal entity (in either case referred to herein as the “agency”) to finance capital improvements to the agency’s system, tax-exempt financing is available for other purposes and, under some circumstances, may be available to finance projects for private companies or governmental projects with very significant private participation.

This guidebook is intended for general informational purposes and cannot anticipate the needs and circumstances of each or any particular agency or company. Public agencies and private companies considering the financing of water or wastewater projects should consult with expert counsel early in the process.

Orrick, Herrington & Sutcliffe LLP has been ranked first in the country as bond counsel for most of the last two decades and has a long history of participation, in a wide variety of roles, in water and wastewater financings. In addition to bond counsel, disclosure counsel, underwriter’s counsel and lender’s counsel services, Orrick can provide legislative services through its governmental affairs practice and can provide financial advisory, arbitrage rebate calculation and continuing disclosure services through Orrick’s wholly owned subsidiary BLX Group (formerly Bond Logistix LLC).

CHAPTER ONE

Why Bonds?

Debt Financing vs. Pay-as-you-go

Water or wastewater system capital expenditures generally fall into one of two categories. Ongoing system maintenance, including replacement of worn equipment and expenditures on short-lived assets, tends to require expenditures that are regular and in relatively small and predictable amounts. Major system improvements and expansion, by contrast, generally involve significant expenditures over relatively short periods of time for assets that will provide benefits (and often contribute to revenue generation) for many years, in the case of dams and pipes for a century or more.

Debt financing of routine capital expenditures is possible, but such expenditures can generally be fit, like operation and maintenance expenses, into an agency's annual budget. Agencies therefore generally choose to finance such expenditures on a "pay-as-you-go" basis. Connection fees, if accumulated in advance of the need for expenditure, may be an additional source for "pay-as-you-go" funding. Credit-related limitations on debt financing also lead agencies to include a "pay-as-you-go" component in their capital strategies.

CREDIT-RELATED LIMITS ON DEBT FINANCING

- There is a limit to the amount of debt that enterprise revenues can support comfortably
- Excessive reliance on debt to pay for expenditures is a "credit negative"
- "Debt service coverage" requirements require revenue generation at levels that exceed cash operation and maintenance costs and debt service, leaving funds for capital expenditure

For significant capital projects with long useful lives, debt financing tends to be a better alternative. Large capital expenditure items can be difficult to accommodate on a “pay-as-you-go” basis and, even if feasible, can require rate spikes (large temporary rate increases) or significantly deplete fund balances. From a policy standpoint, moreover, it makes sense to pay for long-term assets over the life of the assets, issuing 20, 30 or 40 year bonds to finance a 20, 30 or 40-plus year asset as one would purchase a home with a 30-year home mortgage loan. Besides matching the cost of an asset with its use in a temporal sense, debt financing also achieves a measure of intergenerational fairness: the beneficiaries of a capital improvement over its long life will be the ratepayers whose payments service the debt over a similar term.

Fortunately, because they provide an essential service customers must pay for, water and wastewater enterprises can be strong credits. Water and wastewater agencies who approach debt financing thoughtfully can generally borrow significant amounts at attractive rates.

Tax-Exempt Bonds

Tax-exempt debt can, naturally, be sold with lower interest rates than if the interest on such debt were taxable, and the resulting difference in debt service cost to the borrowing agency can be significant. This is especially the case in higher interest rate and marginal income tax rate environments, where the spread between taxable and tax-exempt rates tends to widen. As described in Chapter 5, federal income tax exemption is conditioned upon satisfaction of a variety of requirements, but for bonds issued to finance governmentally owned and operated water and wastewater facilities, these conditions are generally neither difficult nor burdensome to meet. As discussed in Chapter 8, tax-exempt financings for private owners and operators and for governmental projects with substantial private participation present more challenges and can involve trade-offs, but the potential for debt service savings still makes any available tax-exempt financing worth considering.

Federal subsidies for debt can take forms other than an exemption of interest from the gross income of the holder. Pursuant to the Build America Bonds program, for example, which expired at the end of 2010, interest on “Build America Bonds” is not tax-exempt; instead, the U.S. Treasury makes ongoing subsidy payments to the issuer based on the amount of interest paid.

In addition, because most water and wastewater enterprise-revenue-secured bonds are tax-exempt, the market for such bonds is generally broader and such bonds are usually more liquid investments if they are tax-exempt. The investors most familiar with water and wastewater credits are purchasers of tax-exempt debt. A broader market, greater liquidity and a larger number of actively engaged investors all reduce interest rates and an agency’s tax-exempt borrowing costs even further.

CHAPTER TWO

Enterprise Revenue Borrowing

The basic issues a water or wastewater agency must consider in any enterprise borrowing are (a) the scope of the enterprise for which the debt is to be incurred and by which it must be supported and (b) the priority of the allocation of enterprise revenues to pay: (i) debt service, including different categories of debt, and (ii) other costs borne by the enterprise, including operation and maintenance expenses. An agency's approach to these issues must be carefully considered, as it will impact both current and future financings.

Project Finance or System Finance?

For water and wastewater enterprise debt, the "enterprise" is the source of revenues and must bear the burden of operation and maintenance expenses, enterprise debt and required "coverage." Although the improvements financed by a borrowing are almost always a part of the "enterprise," the overall scope of the enterprise may be defined in different ways. Two principal issues are (a) how to define an enterprise system and (b) whether to support the debt in question with the revenues of the financed facilities alone or with the revenues of the entire system.

Enterprise System Definition. At first glance, the many constituent parts of a water system or wastewater system appear to simply constitute a single enterprise for delivering services to ratepayers and collecting revenues to support operations and the ongoing capital investment necessary to maintain or enhance such deliveries and collections. Each system, however, may be divisible along a number of lines, including by specific type of service rendered, categories of customer or geographical location, or even as a single facility providing unique services to certain customers, such as a desalination plant. A "water enterprise," for example, may include all services to all customers in all locations or could consist solely of the delivery of untreated water to agricultural users in a specific district. Systems may also be

combined. An agency offering both water and wastewater service could establish a single water and wastewater enterprise for both accounting and operational purposes, though such combinations can be complex because of laws limiting the imposition and calculation of rates and fees for services rendered to customers of the system.

In dividing and combining water and wastewater systems for enterprise purposes, agencies must comply with applicable parameters for enterprise accounting and all applicable legal requirements (*e.g.*, as is discussed in greater detail in Chapter 3, agencies with “debt limits” imposed by state law generally need to rely on the “special fund” debt exception to such limitations, which requires a nexus between the purpose of a borrowing and the source of revenues from which it will be paid). Also, an enterprise definition does not necessarily determine revenue-generation capabilities (*e.g.*, the authority to charge for wastewater service does not confer upon an agency the ability to charge wastewater users for amounts needed to pay debt for water system improvements, even if the water and wastewater systems have been combined into a single “enterprise” for accounting or operational purposes).

Decisions about whether to engage in project or system finance can have a major impact on the ability of an agency to finance both current and future capital improvements. If an agency has two operations, for example, one of which has a strong revenue-generating capacity and the other a weak capacity, combining the two into a single “enterprise” for a financing of the strong operation would have the effect of diluting “coverage”—possibly impacting interest and other financing costs and the ratings accorded to the enterprise. On the other hand, the support of the stronger operation through its inclusion with the weaker in the “enterprise” may be necessary if financing is ever needed for the weaker enterprise. Thus, the agency’s expectations about the long-term capital and financing needs of each operation would be critical to determining whether to combine the two operations into a single enterprise for current and future financings or keep them separate. The agency must also consider whether project financing (discussed below) could confer any benefits to either enterprise in connection with the financing of specific, special projects.

The type of facilities being financed can also impact an agency’s definition of “enterprise.” System finance, project finance and special facility finance all carry different implications for enterprise definition.

System Finance. Financed facilities may be part of a revenue-producing system for which no revenues can be specifically allocated (*e.g.*, conveyance facilities such as water or sewer pipes). In this case, the only option is to support the debt with the system as a whole. In other cases, credit, legal or other structuring concerns, based on the factors described below, may lead an agency to determine that system finance would produce better results than project or special facility finance.

Project Finance. Financed facilities may be part of a system but also generate specifically allocable revenues (*e.g.*, output facilities such as reclamation or hydroelectric facilities). In this case, the agency must decide whether to finance the project on a stand-alone basis, defining the project as the “enterprise,” or as part of the system. As a consequence of this choice, “Revenues” and “Operation and Maintenance Expenses” (described below under “Security for Enterprise Debt”) will either pertain only to the project or to the entire system as a whole. The two principal questions to answer prior to financing the project are: Can the project support itself (*i.e.*, generate “Revenues” sufficient for “Operation and Maintenance Expenses,” “Debt Service” and coverage) if not included in the system? and Would the benefit to the system of project revenues be greater than the burden to the system of having the operating, rate and allocation of revenue covenants described below apply to the system as a whole? These questions must be answered keeping in mind the prospect of future borrowings for the project or the system.

Special Facility Finance. Debt for the financed facilities may be payable from a source other than project or system revenues (*e.g.*, facilities financed for private companies, facilities to be paid for by grants or debt for which property taxes or assessments may be levied). In this case, the choice would be whether to finance such facilities using this distinct revenue stream or to finance the facility using the credit of the general enterprise system and either include or, in some cases, continue to exclude the special revenues from the pledged revenues supporting debt backed by the credit of the system. See “Alternatives to Revenue Secured Debt” below. Inclusion of the project in the enterprise need not give rise to system covenants, but it may impact positively or negatively on the agency’s ability to satisfy covenants for current or future system revenue-supported debt.

Security for Enterprise Debt

The basic security for the debt of a water or wastewater enterprise is the ability of the water or wastewater agency to generate revenues sufficient each year to (a) pay operation and maintenance expenses, (b) pay debt service and (c) pay for the renewal or replacement of existing facilities or the acquisition of new facilities necessary to enable the enterprise to provide services to users and to continue to pay operation and maintenance expenses and debt service in future years. Agreements setting forth the terms of the debt obligations of an agency will generally contain a pledge of either net or gross revenues of an enterprise and covenants on the part of the agency intended to assure investors that the enterprise will be managed in a manner consistent with these requirements. Such agreements will define what constitutes, and how to calculate, “Revenues,” “Operation and Maintenance Expenses” and “Debt Service.” Finally, an agency may fund a debt service reserve fund or make certain other assets available as security for holders of its obligations.

Revenue Sources. The way in which the financing documents define “Revenues” of the enterprise is important in two respects: (i) “Revenues” are the moneys from which debt service is paid, and (ii) “Revenues” count toward satisfaction of the agency’s covenants with respect to revenue generation, as described on page 13 in “Operating and Financial Covenants.”

“Revenues” of an enterprise principally consist of the income from the basic revenue sources of the enterprise (*i.e.*, rates and charges, connection fees and standby or availability charges) and may include investment earnings (if not retained for bondholders or used for construction). “Revenues” do not generally include debt proceeds or amounts collected for dedicated purposes such as property taxes for general obligation bonds, assessments for assessment bonds, grants, contributions in aid of construction and refundable deposits; tax revenues may be included if not collected for specific bonds or other purposes, subject to the limitation that inclusion of general tax revenues in

“Revenues” are the moneys from which debt service is paid, and “Revenues” count toward satisfaction of the agency’s covenants with respect to revenue generation

“Revenues” may raise debt limit issues for agencies that must rely on a “special fund” theory to authorize their borrowings, as described in “Chapter 3: Types of Debt Instruments—Authority to Incur Debt,” and may also raise certain concerns among investors or the rating agencies about how such amounts would be treated by a court in the event of a bankruptcy.

Pledge and Allocation of Revenues. The allocation of water and wastewater enterprise “Revenues” involves the timing and priority of application of cash revenues to cash expenditures. For enterprise borrowings, accounting is done on a cash basis as opposed to an accrual basis. “Revenues” and, perhaps, cash on hand at the beginning of the bond year (generally the start of the agency’s fiscal year) enter the “flow of funds”; “Operation and Maintenance Expenses” and “Debt Service” are paid (or cash is set aside for such purposes); and any excess is expended for other purposes or retained. Neither revenue and debt service accruals not received or payable within the year nor depreciation and amortization of intangibles are taken into account.

The “flow of funds” for enterprise revenue financings follows a basic pattern, although definitional choices are involved and some flexibility is possible. Generally, enterprise revenue is deposited into a “revenue fund.” If, as is most frequently the case, the financing documents pledge net “Revenues” of the enterprise to pay the debt obligations issued by the agency, amounts in the revenue fund are used first to pay “Operation and Maintenance Expenses” of the enterprise when due and second to pay or make set-asides for the payment of “Debt Service” and related costs. After payment of operation and maintenance expenses and debt service, “Surplus” is deposited in a fund separate from the revenue fund and may be either expended for other purposes or retained. If, on the other hand, the financing documents pledge gross revenues of the enterprise to pay the debt obligations issued by the agency, debt service on the obligations is paid from the revenue fund prior to payment of operation and maintenance expenses. If “Revenues” are sufficient to pay both “Operation and Maintenance Expenses” and “Debt Service,” the result is the same with either approach. If “Revenues” are not sufficient for the payment of both “Operation and Maintenance Expenses” and “Debt Service,” a gross revenue pledge strengthens investors’ hand in the short run, but nonpayment of operation and maintenance expenses can choke the revenue-producing ability of the enterprise, the long-run security for investors. Therefore, because continued operation of the

enterprise is in the interests of the agency and, generally speaking, investors, net revenue pledges are much more common in practice than gross revenue pledges.

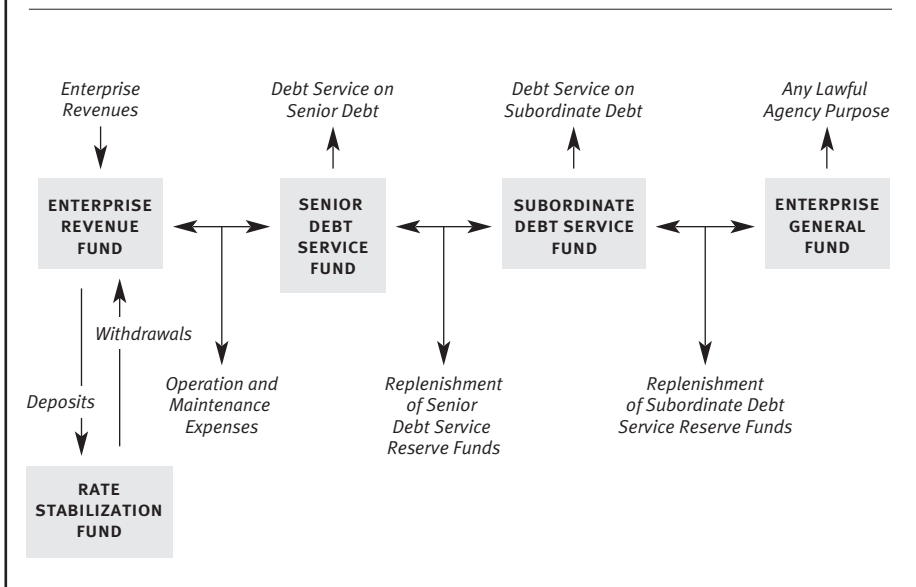
An example of an enterprise flow of funds appears on the opposite page.

As was the case with the definition of “Revenues,” the definition of key terms such as “Operation and Maintenance Expenses,” “Debt Service” and “Surplus” requires careful consideration by the agency.

Operation and Maintenance Expenses. Generally, “Operation and Maintenance Expenses” consist of amounts (other than noncash items) treated as operation and maintenance expenses of the enterprise under generally accepted accounting principles. Thus, “Operation and Maintenance Expenses” usually include the cost of purchased water, repair costs, operation and maintenance cost (including salaries and independent contractor costs), administrative expenses allocable to the enterprise, insurance premiums and debt-carrying costs such as trustee, legal and accounting fees, but exclude depreciation, replacement or obsolescence charges and amortization of intangibles, premiums and discounts. “Operation and Maintenance Expenses” can also exclude expenses paid from sources other than “Revenues” (*e.g.*, taxes), which has the effect of increasing coverage for covenant purposes as described below under “Operating and Financial Covenants.” “Operation and Maintenance Expenses” do not include capital cost or “Debt Service.”

Certain obligations of an agency may be operation and maintenance expenses under generally accepted accounting principles but require large payments over time like debt (*e.g.*, “take or pay” water purchase contracts). Since these types of obligations are paid prior to debt service when the financing documents pledge net revenues rather than gross revenues, there may in some cases be a perceived risk to debt security in net revenue financings. One approach to this issue is to add an additional rate covenant requiring coverage over obligation payments as well as debt service (*e.g.*, net revenues equal to 110% of debt service plus other obligation payments). Another approach is to require a determination by the agency that entering into the obligation will be beneficial to the enterprise and will not adversely affect the agency’s ability to comply with its rate covenant. See “Operating and Financial Covenants” on the opposite page.

Typical Enterprise Revenue Flow of Funds



Debt Service. “Debt Service” consists primarily of principal and interest payable on debt, broadly defined to include revenue bonds, revenue warrants, leases, installment sale agreements and similar obligations (without regard to whether such obligations are publicly offered or privately held or whether such obligations are “debt” within the meaning of constitutional or statutory restrictions). See “Chapter 3: Types of Debt Instruments.” “Debt Service” generally excludes, however, interest payments which have been “capitalized” and non-revenue-supported debt such as general obligation bonds, assessments and conduit debt obligations paid by private borrowers. “Debt Service” may consist of multiple priorities (*e.g.*, senior lien debt, parity debt and subordinate lien debt).

Related to an agency’s debt service obligations are obligations to replenish or fund a debt service reserve fund, make payments with respect to a debt service reserve fund surety bond policy or reimburse credit or liquidity enhancement providers for advances made to pay principal or interest on debt obligations, as applicable. Reserve fund replenishment is generally subordinate to principal and interest payments on the obligations themselves (although it can be senior to subordinate debt), and credit or liquidity enhancement provider reimbursement can be subordinate to or on a parity with the payment of principal and interest on the debt obligations they support.

Surplus. Any “Revenues” not needed to pay “Operation and Maintenance Expenses” and “Debt Service” and related expenses are “Surplus.” “Surplus,” or whatever other term is used to describe such amounts, may be expended for other agency purposes (such as capital costs not financed with debt) or held for expenditure in future years. An agency will, in complying with its rate covenant, produce an annual “Surplus.” “Surplus” should not be thought of, then, as extra or unnecessary revenues.

Related to the priority of allocation of revenues for various purposes is the timing of such allocations. Revenues are generally deposited into an agency-held “revenue fund” when received. Because bills must be paid and operation and maintenance expenses are a first priority (in both importance and position in the flow of funds in the case of a net revenue pledge), “Operation and Maintenance Expenses” can generally be paid from the revenue fund when due. Agencies are also generally allowed to set aside amounts for payment of operation and maintenance expenses billed in arrears. Amounts for “Debt Service” are either set aside by the agency or transferred to the trustee for the applicable debt on a periodic basis (e.g., monthly) as “Debt Service” accrues or paid to the trustee or debtholders when due (most likely, paid to the trustee a few days before payment by the trustee to debtholders). “Surplus” is generally held by the agency until spent.

Timing issues may, of course, become priority issues, especially if “Revenues” and/or “Operation and Maintenance Expenses” are uneven over the course of a year. Paying debt service only when due, for example, can disrupt the parity of debt (e.g., all net revenues are applied on June 1 to pay December 1 to May 31 interest on Series A Bonds, leaving only a month to accumulate sufficient revenues to pay, on July 1, January 1 to June 30 interest on Series B Bonds). Sufficient amounts may not always be available for monthly set-asides, however, if “Revenues” (gross or net) are uneven over the course of the year.

The proper allocation of “Revenues” to “Operation and Maintenance Expenses,” “Debt Service” and “Surplus” is ultimately a management issue. Legal documents cannot substitute for sound agency management attentive to the need to ensure that enterprise revenues are handled in such a way that operation and maintenance expenses and debt service are paid in a timely manner and amounts are not spent as “Surplus” if they are in fact likely to be needed for higher-priority payments later in the year.

Operating and Financial Covenants. In addition to pledging gross or net revenues to repayment of debt obligations issued by an agency, financing documents will usually contain a number of operational and financial covenants with which an agency must comply. Operating covenants are designed to assure that the enterprise is run and maintained as a revenue-producing enterprise, while financial covenants generally require an enterprise to meet certain financial metrics either on a periodic basis or in connection with the issuance of additional debt secured by revenues of the enterprise. Failure to comply with such covenants can trigger a requirement to raise rates or engage a consulting engineer to provide advice or prescriptions for system operations, and such failure can result in defaults under the financing documents.

Typical operating covenants include:

- Covenant to maintain the system in good repair and working order and to pay operation and maintenance expenses when due.
- Covenant to charge and collect for the product or services provided by the system.
- Covenant to keep system facilities and revenues free of liens (other than for future financings and other charges, as permitted under the financing documents).
- Covenant to maintain liability insurance and to insure the facilities of the system. The agency is generally allowed, however, to self-insure to a certain extent or upon certain conditions.
- Covenant not to sell or otherwise dispose of any essential part of the system. There may also be a covenant to apply eminent domain or insurance proceeds either to acquire or build replacement facilities or to repay debt.
- Covenant to comply with contracts (including the terms of any grants received) and governmental regulations, to obtain any necessary government approvals and to pay any applicable taxes. The agency is generally allowed, however, to contest matters in good faith.
- Covenant to adopt budgets, maintain adequate accounting records and cause annual audits to be performed.

Financial covenants require an enterprise to meet certain financial metrics either on a periodic basis or in connection with certain specified actions, such as issuing additional debt secured by “Revenues.” The following are typical financial covenants.

Rate Covenant. From an investor's standpoint, available funds must be sufficient to pay all "Maintenance and Operation Expenses," other essential expenses of the system and "Debt Service." A rate covenant is designed to assure that an agency will establish and collect rates and charges, connection fees, standby charges and other revenue items in an amount sufficient to satisfy its operational needs and debt service obligations. Typically, these covenants require that "Revenues" less "Operation and Maintenance Expenses," or "Net Revenues," in each fiscal year equal a percentage (typically 110–125%) of "Debt Service" for such fiscal year. This is often true even for financings that involve a gross revenue pledge, as investors are generally no less concerned about the continued operation of the enterprise in such instances. Although there is some flexibility in definitions, the rate covenant test is structured from a cash standpoint: that is, "Revenues" as received not as accrued and "Operation and Maintenance Expenses" excluding items like depreciation or amortization of intangibles. There are often additional tests to be satisfied, such as: (a) a requirement that revenues actually generated in that fiscal year (*i.e.*, disregarding the effect of any rate stabilization mechanisms) be at least equal to 100% of "Operation and Maintenance Expenses" and "Debt Service," (b) a requirement that "Revenues" also cover all other amounts payable from "Revenues" (such as subordinate debt or reserve fund replenishment) or (c) a requirement that a coverage test of some lesser percentage (*e.g.*, 105% or 110%) be satisfied even if certain debt-like "Operation and Maintenance Expenses" (*e.g.*, long-term take-or-pay contracts) are treated as debt service. "Coverage" (the amount by which net "Revenues" are required to exceed "Debt Service") provides both a margin of safety if revenues are unexpectedly low or expenses are unexpectedly high and a source of funds to pay or account for important items not constituting "Operation and Maintenance Expenses."

A rate covenant typically requires that "Revenues" less "Operation and Maintenance Expenses," or "Net Revenues," in each fiscal year equal a percentage (typically 110–125%) of "Debt Service" for such fiscal year.

Covenants Regarding Allocation of Revenues. In order to effect the allocation of "Revenues" in the order of priority agreed to for the benefit of investors, an agency

is required to establish and maintain separate funds and accounts for incoming revenues, rate stabilization funds, debt service funds, debt service reserve funds, if any, and excess revenues. Separate bank accounts or investments are not generally necessary, but “account” balances at any point in time must be readily determinable. The priority of the allocation of enterprise revenues is discussed above.

Project Covenants. Project covenants are designed to ensure that borrowed funds are expended on capital improvements that contribute to the generation of enterprise revenues in the manner contemplated by the financing documents and that such improvements, especially when necessary to the normal operations of the system, remain a part of the system. The stringency of project covenants depends upon the relation of the revenue enhancement potential of the financed improvements to the revenue potential of the enterprise as a whole.

The extremes are:

- (i) **No Material Revenue Generation.** If the financed improvements do not contribute to the generation of enterprise revenues (*e.g.*, facilities to provide a service which, though beneficial, is not required to be provided and for which customers are not additionally charged) or are but a small part of a large existing system, the agency may retain the ability under the financing documents to freely substitute other or additional projects.
- (ii) **Project Finance.** If the financed improvements constitute the enterprise, or are essential to the revenue-generating capacity of the enterprise, proceeds of the borrowing may be required to be expended as contemplated in the project descriptions found in various financing documents. Expenditure on improvements with lesser revenue-generation potential could have an adverse impact on available revenues in such situations, and even expenditure on improvements with equal or greater revenue-generation potential could still fundamentally alter investor security.

Most financings fall somewhere between these extremes—the planned improvements are important and valuable from a revenue standpoint but are not, in and of themselves, critical to the agency’s ability to generate net revenues sufficient to pay debt service. Although investors have an interest in the successful completion of the project, the agency may be allowed to substitute alternative improvements of

equal value to the enterprise from a revenue standpoint. Substitution may or may not require evaluation by a consulting engineer or other expert as to the benefits to be provided by the alternate expenditure.

In most cases, financing proceeds will be held by a bond trustee pending expenditure, although the agency usually has significant control over the investment of such funds and obtains the benefit of the return on such investment either as additional project money or as revenues. Agencies with the capability of handling the investment of substantial sums, on the other hand, may be allowed to hold the project fund. In either event, the agency is generally required to proceed with due diligence to complete the financed improvements.

Additional Debt Tests. The agency must generally covenant not to issue additional enterprise debt payable senior to or on parity with, or in some cases subordinate to, outstanding debt unless certain conditions specified in the financing documents are satisfied. See “Additional Debt Tests” below for an extended discussion of typical conditions to such issuance imposed in financing documents.

Reserves and Other Assets. An agency may find it necessary or desirable from time to time to make certain trade-offs in order to improve the credit profile of the obligations it will issue or has issued. In addition to operational adjustments, increasing revenues or decreasing operation and maintenance expenses, pledging gross revenues of the enterprise, restructuring debt as an enterprise or project financing, or agreeing to more restrictive or investor-friendly operating or financial covenants, agencies may provide additional security for their obligations by establishing a debt service reserve fund or pledging additional moneys, property or sources of revenue to pay such obligations. In addition, specifically for issues of variable rate debt obligations, an agency may decide or be required to obtain credit or liquidity support. See “Chapter 3: Types of Debt Instruments—Credit Enhancement” for a discussion of the issues involved in obtaining credit and liquidity support for an agency’s variable-rate debt obligations.

Debt Service Reserve Funds. Issues of water and wastewater enterprise debt are generally secured by a debt service reserve fund, generally held by the bond trustee and invested in high-quality debt securities (often United States Treasury securities, although investment agreements or other securities are also used). Moneys in

debt service reserve funds may be used solely to make debt service payments should available net revenues prove insufficient (or to make a final payment on debt in the case of maturity or early redemption) on the bonds secured by such reserve fund.

Debt service reserve funds are generally maintained pursuant to the financing documents at a level equal to (a) maximum annual debt service on the obligations secured by the reserve fund, (b) a percentage of the outstanding principal of the obligations secured by the reserve fund (*e.g.*, 10%) or (c) the maximum amount that can be invested without yield limitations for tax purposes. Investments in debt service reserve funds must be periodically valued (most commonly, annually on a lesser of cost or market basis), and the agency is required to deposit any amounts necessary to increase the amount on deposit in an underfunded debt service reserve fund (by reason of a withdrawal or changes in market value of investments) to the required level of funding pursuant to the terms of the financing documents. The obligation to “top off” a debt service reserve fund is generally subordinate to an agency’s obligation to pay principal and interest on the debt obligations secured by the reserve fund.

If an agency issues more than one series of debt, the agency may provide for a common or “pooled” debt service reserve fund securing all debt issues, or it may provide for separate reserve funds for particular issues. A common debt service reserve fund will typically be established pursuant to a master bond resolution or indenture under which all parity debt is to be issued. With a common reserve fund, all amounts are available for all issues and, since maximum annual debt service for two or more issues taken in the aggregate is usually less than the sum of the maximum annual debt service amounts calculated for each of the individual issues in isolation, reserve fund sizing requirements may be less in the case of a common reserve fund. On the other hand, with a common reserve fund, the agency may need to covenant to fund the debt service reserve fund to an agreed level in connection with each subsequent issue, thereby sacrificing the flexibility of choosing whether to establish a debt service reserve fund in connection with future borrowings and determining the size of such fund. An in-between approach allows the agency the flexibility to determine whether any particular new debt issue will be secured by a common debt service reserve fund or a separate debt service reserve fund.

Debt Service Reserve Fund Surety Bonds. In place of a reserve account funded from bond proceeds and invested in permitted securities, an agency may obtain a debt service reserve fund surety bond to provide additional security for one or more series of debt obligations. A debt service reserve fund surety bond, generally issued by a bond insurance company and usually available only if the bond insurance company is insuring the related debt, provides funds to pay debt service under the circumstances under which the bond trustee would otherwise use amounts on deposit in a reserve fund. The total amount available under the surety bond is equal to the amount that otherwise would be deposited in the reserve fund (*e.g.*, maximum annual debt service). Any draws must be repaid with interest.

An agency's decision whether or not to use a surety bond in place of a cash funded reserve fund will turn on a balance among the cost of issuing additional bonds to fund a reserve fund, the impact of such additional bond on the debt service coverage or debt capacity, the reinvestment environment (can cash in the debt service reserve fund be invested at a yield equal to or even exceeding the interest cost of the bonds?), the surety bond premium (including the fact that such premiums, like bond insurance premiums, are not refundable even if the bonds are refunded) and the risk (discussed below) that the surety will have reduced or no value should the provider's credit standing fall.

Due to the rating agencies' downgrades of most of the major bond insurance providers in connection with the recent global financial crisis, and the declining prevalence of bond insurance among new issuances, debt service reserve fund sureties are no longer frequently employed. A common issue now confronted by agencies with existing financing programs is how to deal with debt service reserve fund sureties issued by entities which have subsequently suffered significant credit downgrades. Financing documents generally provided either that (i) the ratings of the provider of the debt service reserve fund surety must meet certain requirements at the time of issuance of the surety, or (ii) the ratings of the provider of the debt service reserve fund surety must meet certain requirements at all times in which the surety is deemed effective under the financing documents. In the first situation, many agencies have chosen to leave debt service reserve fund sureties in place, even if the current ratings of the issuer of such sureties have dropped precipitously,

provided that the issuing entity has not been subject to liquidation proceedings, placed in insolvency receivership or otherwise voluntarily or involuntarily commenced a winding up of its affairs. When there is a covenant in the financing documents regarding maintenance of ratings by the surety provider on an ongoing basis or the surety provider has been adjudged insolvent or entered into liquidation, restructuring or other forms of winding up, agencies have either had to deposit funds into the reserve account to replace the disqualified surety bond, or else have been required to secure a new surety from one of the remaining providers who qualify under the terms of the original financing documents.

Real and Personal Property. In addition to pledging specified revenue streams for payment of debt service, an agency may also secure its enterprise debt with a pledge or grant of a security interest in real or personal property. Apart from lease financing (discussed in more detail in “Chapter 3: Types of Debt Instruments—Lease Financings: Lease Revenue Bonds and Certificates of Participation”), where the lessor necessarily has an interest in and certain rights with respect to the leased property, there is no legal necessity for enterprise debt to be secured by a pledge or mortgage of the financed improvements or other property. In fact, because of the following important limitations, water and wastewater enterprise debt is generally not secured by real or personal property.

First, there are legal limitations on the ability of water and wastewater agencies to secure debt with real or personal property. Public entities need affirmative statutory authority to pledge property to secure debt. While water and wastewater agencies in California have general authority to pledge revenues, and certain types of debt structures, such as lease financings, can be used to give investors an interest in agency property, there is no general statutory authority to pledge or mortgage assets, and in most cases a pledge or mortgage of property will be legally precluded. Similarly, legal documents allowing creditors to seize or take over operation of essential public service facilities may not be enforceable for obvious public policy reasons.

Additionally, many, if not most, components of a water or wastewater system have no value to creditors apart from their contribution to revenue generation by the enterprise. Although equipment and administrative buildings may have resale or occupancy value, buried pipes, water storage facilities and oxidation ponds do not. Therefore, if revenue-generation capacity is problematic, the ability to

seize system assets of little value except for the role they play in the generation of system revenues would rarely provide sufficient additional investor comfort for a financing to proceed, except in those rare instances in which an agency can identify non-system property or assets that are not encumbered by existing pledges and have some value in the market separate and apart from their relationship to such system. Conversely, if the ability to collect sufficient revenues seems assured, a property pledge should not be necessary.

Additional Debt Tests

Critical to the security for agency enterprise debt is the priority of the claim on revenues for the payment of such debt in comparison with the claims of other enterprise debt. With respect to its claim for payment, debt can be senior to, subordinate to, or on a parity with other debt. In financings that involve a net revenue pledge, as described above in “Security for Enterprise Debt—Pledge and Allocation of Revenues,” all enterprise revenue debt is generally subordinate to the payment of “Operation and Maintenance Expenses.” Debt can be on a “parity” with other debt with respect to its claim on net revenues, even if the two obligations are issued under separate documents and secured by separate debt service reserve funds.

As claim priority affects security for the debt, marketability will be enhanced if an agency can give debtholders a “first lien” on “Revenues,” gross or net, as applicable. An agency will therefore generally find it advantageous to preserve its ability to offer similar claim priority in potential subsequent offerings of enterprise debt. The benefit current holders of the debt obligations derive from their priority claims, however, is subject to dilution should future debt obligations be issued on a parity with the outstanding debt. The value of a particular claim priority for marketability of any issue is therefore undercut by the prospect of future dilution as a result of subsequent issuances of debt with the same priority claim. The solution to the agency flexibility versus debt security and marketability trade-off is for the agency to covenant to issue additional parity debt only if it is able to satisfy certain financial tests or if the debt is of certain limited types or for certain limited purposes.

In addition to complying with financial covenants or issuing debt of certain limited types or for certain limited purposes, an agency may also be required to certify that it is not in default with respect to any outstanding debt and, if the additional debt is to be secured by an existing debt service reserve fund, to increase

amounts available in the reserve fund to avoid dilution of the security the reserve fund provides to outstanding debt. Limitations on the issuance of future debt on a subordinate basis can be looser or absent entirely, the principal concern being that an insufficiency of revenues to pay subordinate debt could lead to general financial difficulties or that certain payment-timing considerations may inadvertently impact the security of parity debt holders.

Types of Additional Debt Test. Additional debt tests require an agency to demonstrate compliance with certain financial metrics, generally satisfaction of its rate covenant during a specified period or periods taking into account the proposed additional debt. An additional debt test can be based on historical results or can rely of projections of future results. An historical test could require, for example, that the agency would have satisfied its rate covenant during the immediately preceding twelve months, or the most recently completed fiscal year, even if the additional parity debt had been outstanding during such time. Such a test is difficult to satisfy, however, unless actual “coverage” during the period was significantly in excess of required amounts and the amount of additional parity debt to be issued is modest. One potential solution is for the historical test to allow for modification based upon the revenue-producing capability of the facility to be financed or rate increases subsequently put into effect (*e.g.*, in addition to including debt service on the new debt in the prior year’s debt service, recalculating the prior year’s revenues assuming current rates were charged and product sold included the expected output of the facility to be financed).

An alternative is to test the sufficiency of projected future revenues instead of modified historical revenues. Projections tests vary in terms of the time period examined. A common approach is to require projections to show satisfaction of the rate covenant in each of the next five fiscal years. An alternate approach is to consider the first agency fiscal year for which interest on the proposed additional debt is not capitalized. A proper time period will include a period during which the enterprise must fully support both the outstanding and the additional debt but will not extend beyond the time horizon over which meaningful revenue and expense forecasts can be made.

One key issue relating to projections tests is how the assumptions to be used in projecting future net “Revenues” and “Debt Service” are determined and by whom. When incurring debt, a responsible agency naturally expects to be able to satisfy its rate covenant in future years. Investor security and the marketability of the debt can be enhanced, however, through the imposition of various rules governing the scope and formulation of such projections. Specific calculations must generally be prepared and certified by the agency, and a certificate of an independent engineering firm may also be required to confirm the reasonableness of assumptions and the related calculations.

The agency may need to make certain prescribed assumptions even though the agency may have reason to expect more favorable results. On the revenue side, for example, an agency may be required to disregard all or a portion of expected connection charges (because of their variable nature) or revenues resulting from rate increases not yet enacted (because of potential political resistance to rate increases), or to assume flat revenue growth over an initial period. On the debt service side, variable-rate debt and bullet principal payments present difficulties when determining appropriate assumptions. Variable-rate debt is generally assumed to bear interest at either current or recent variable rates or at the current index rate or an assumed fixed rate. Bullet maturities can often be assumed to be refinanced over a longer term. Projections test parameters can also address issues relating to cost of water, additional borrowing needs and use of rate stabilization fund moneys. For many agencies, it will also be important to specify the treatment of swap revenues, obligations and termination payments under such tests.

An appropriate projections test can only be developed with the circumstances of a particular agency in mind. As with basic structuring decisions involved in the issuance of debt obligations generally, it is critical for an agency to consider carefully future borrowing needs and the likely impact of an additional bond test’s assumptions and requirements before undertaking its initial financing or any restructuring of its outstanding debt obligations.

Additional Debt Test Exceptions. Financing documents frequently allow certain types of parity debt to be issued without complying with additional debt tests. The most common such exception is for refunding debt. Debt issued to refund outstanding parity debt is exempt from additional debt tests on the theory that new debt replacing previously issued, higher-cost debt reduces overall debt service

payable by the enterprise and thereby enhances rather than dilutes the security for existing holders. A refunding exception generally requires projected debt service savings and may require that debt service actually be decreased in each future year or that the refunding reduce maximum annual debt service (*i.e.*, the total amount to be paid in the year that debt service on all parity obligations is highest).

Another common exemption is for completion debt, that is debt issued to complete the financing of the project for which previous debt was issued. The completion of such a project is often important to the security for the outstanding debt. Therefore, allowing parity debt necessary to provide funds to complete the project may be of more value to the holders of existing debt than the impact of the dilution of their claim on enterprise revenues.

Additional debt incurred pursuant to reimbursement agreements and other documents relating to credit or liquidity support instruments is also generally exempt from additional debt tests. Providers of credit enhancement and liquidity facilities often insist that the agency's obligation to reimburse them for any draws on the facility be on a parity with other enterprise debt, although certain fees charged under such documents may be subordinate to regular principal and interest payments. Although a reimbursement obligation generally has a higher interest cost and sometimes an earlier due date than the parity debt from which it is generated, forcing a hypothetical reimbursement obligation to satisfy an additional debt test would generally not be practical, since such obligations arise outside of the direct control of the agency.

Rate Stabilization

The basic concept of rate stabilization is to collect and set aside revenues in earlier years in excess of what is actually needed and to use amounts set aside to pay expenses in later years. This approach is particularly useful if debt service is structured to increase over time, either because financing a capital improvement program will result in additional layers of debt or because interest for a given debt issue is capitalized during the construction of the financed facility. More often than not, such stabilization occurs through small, regular rate increases as opposed to one or more significant increases.

Because agencies agree to have net revenues in each year equal to a given percentage of debt service, special accounting treatment is needed for amounts the agency sets aside. Generally, this is accomplished through the establishment of a

“rate stabilization fund” that allows withdrawals for transfer to the revenue fund or for expenditure at any time. The legal documents allow amounts deposited in such rate stabilization fund to be treated as “Revenues” for rate covenant purposes in the year such amounts are transferred to the revenue fund (*e.g.*, by defining “Revenues” to include rate stabilization fund withdrawals). If, for example, an agency has covenanted to have “Net Revenues” each year at least equal to 120% of “Debt Service” and deposits \$10 in a rate stabilization fund, if in a later year debt service were \$100 the agency could satisfy its rate covenant by withdrawing such \$10 and collecting \$110 of “Net Revenues” (instead of collecting \$120 of “Net Revenues”). However, an agency may nevertheless need to covenant to collect current “Revenues” (not counting rate stabilization fund withdrawals) sufficient to at least cover “Operation and Maintenance Expenses” and “Debt Service” (*i.e.*, a covenant not to run at a loss on a current basis) in order to establish an attractive credit profile for investors, underwriters, rating agencies or credit enhancers. The concern is that if an agency relies too heavily on rate stabilization fund withdrawals it may be unable to raise revenues sufficiently quickly once the rate stabilization fund has been exhausted.

Bond documents establishing rate stabilization funds differ with respect to how amounts deposited in the rate stabilization fund are treated for rate covenant purposes in the year of deposit. One approach is to exclude amounts deposited in the rate stabilization fund from “Revenues.” In this case, with a rate covenant requiring “Net Revenues” to be at least 120% of “Debt Service” and “Debt Service” of \$100, the agency would need to collect \$130 of “Net Revenues” in a given year to make a \$10 rate stabilization fund deposit. Although the rate stabilization fund allows an agency to choose in which year to count cash received as “Revenues,” the agency must on average over time collect revenues sufficient for “Debt Service” coverage.

An alternative approach is to allow rate stabilization fund deposits only from surplus, but not exclude amounts deposited in the rate stabilization fund from “Revenues” for rate covenant purposes. In this case, with the rate covenant and “Debt Service” described above, an agency could collect “Net Revenues” of \$120 and, so long as such amount was not otherwise expended, deposit \$20 in the rate stabilization fund, collect \$100 of “Net Revenues” the next year (which with a withdrawal of the \$20 previously deposited would satisfy the rate covenant) and again deposit \$20 in the rate stabilization fund. The rate stabilization fund thus allows a single dollar received to be treated as “Revenues” in successive years and the rate covenant becomes, in effect, a minimum balance requirement.

With either approach, an agency can be allowed to make an initial deposit into the rate stabilization fund from amounts on hand when debt is first incurred. Further, ongoing rate stabilization fund deposits in any given year are generally allowed to be made after the end of the year, so an agency can reconcile its books and be assured that making a rate stabilization fund deposit will not cause it to fail to satisfy its rate covenant.

By allowing an agency to shift revenues from one year to another, a rate stabilization fund, at least to some extent, always impacts the security provided to debtholders by a rate covenant. The strength of the rate covenant is diluted to a much lesser degree, however, if amounts deposited to the rate stabilization fund are deducted from “Revenues” in the year of deposit. When deciding whether and what type of rate stabilization fund to employ in an initial and future financings, the strategic issue for the agency is similar to that presented by a rate covenant decision. Flexibility is generally desirable, but if looser covenants or accounting rules are viewed by investors, underwriters, rating agencies or credit enhancers as adversely impacting security for the agency’s debt, flexibility may come at an unacceptable cost.

Short-Term Financings

Water and wastewater agencies may also pursue short-term financings, generally for cash flow borrowings (or “working capital” borrowings), financings for capital items with relatively short useful lives and interim financings for long-term capital assets. Most agencies have statutory authority to issue notes or warrants, although these are generally limited as to both term and the aggregate principal amount outstanding at any one time (*e.g.*, five years and 1/2% of the assessed valuation of property within the jurisdiction of the agency). Such notes may include revenue anticipation notes, bond anticipation notes and, in certain circumstances, grant anticipation notes.

Some agencies also have the power to issue commercial paper or can do so under other statutes such as those authorizing the issuance of warrants. A commercial paper program provides for the issuance of notes with 1 to 270-day maturities, with the expectation that new notes will be issued to pay maturing notes (referred to as a “roll” of the commercial paper). The amount of commercial paper outstanding can be increased by the issuance of new notes or decreased by paying notes at maturity without a roll. A commercial paper program can be a short-term financing device or an alternative form of variable-rate debt. Short-term

debt obligations, whether they be notes, warrants or commercial paper notes, are referred to in this Chapter as “notes.”

Finally, if the agency is subject to a constitutional or statutory debt limit the short-term financing must qualify for a short-term borrowing debt limit exception (generally available for borrowings that are repaid within the same fiscal year) or a special fund debt limit exception, as discussed further in Chapter 3.

Cash Flow Borrowings. Cash flow borrowings are useful if an agency’s revenues and/or expenses are uneven over the course of its fiscal year. An agency may, for example, receive substantial property tax or standby or availability charge revenue twice a year, water sales may be highly seasonal or suppliers may need to be paid in advance. In order to smooth cash flow over the course of a single fiscal year, note proceeds can be applied to pay current expenses and revenues received later in the year can be applied to repay the notes.

Because the proceeds of the borrowing are not expended for a capital item, to be federally tax-exempt the notes must satisfy the requirements of the Internal Revenue Service regulations governing tax and revenue anticipation notes. These regulations generally limit the amount of the borrowing to the agency’s expected cash flow deficit (with certain adjustments). From a security standpoint, it will also generally be necessary to provide a mechanism to set aside revenues for the payment of notes as available revenues are received by the agency.

Financing for Short-Lived Capital Assets. Capital items with relatively short useful lives, such as equipment, are often best financed with short-term borrowings. This allows the capital expense to be borne over the useful life of the items. Statutes authorizing the issuance of notes also generally do not contain as many procedural requirements (*e.g.*, voter approval) as bond statutes.

Interim Financings for Long-Term Capital Assets. Short-term borrowings can provide interim financings for the acquisition or construction of long-term capital assets anticipated to be financed on a permanent basis at a later date. The permanent source of funding could be a grant from another governmental agency (in which case the notes are usually referred to as “grant anticipation notes”) and/or an issuance by the agency of long-term debt (in which case the notes are usually referred to as “bond anticipation notes,” though commercial paper notes are also issued for this purpose

in connection with a plan of finance that anticipates future bond issuances to “take out” commercial paper that has been issued over time in connection with multiple smaller projects or stages of a larger project). Flexibility with respect to the ultimate date of issuance of long-term debt may be useful because the amounts needed cannot be determined within a reasonable range of certainty (because construction costs are highly variable or the availability of grant money is uncertain), because the anticipated resolution of legal or financial issues relating to the agency may improve the agency’s credit or allow the agency to borrow for a longer term or because interest rates are considered high and likely to decline in the future.

A basic security issue for interim financing is the comfort level investors can reach with respect to the ability of the agency to pay (through refinancing or otherwise) the notes. The timing of grant receipts is notoriously unpredictable. With respect to bond anticipation notes, the factors influencing the agency’s decision to postpone permanent financing can also lead to investor discomfort, as can market turmoil or significant future uncertainties at the time the bond anticipation notes are issued. Also, the agency takes the risk that future interest rates could increase and long-term financing could ultimately be obtainable only upon unfavorable terms. Because of these risks, if agencies need or want to finance long-term capital assets on a long-term basis, they generally do not resort to interim financing without a compelling reason.

Alternatives to Revenue Secured Debt

In addition to debt secured by revenues of a water or wastewater enterprise, agencies may usually (subject to certain conditions) issue bonds secured by pledges of other types of funds, including revenues of *ad valorem* property taxes imposed by the agency and special assessments assessed on parcels within the agency’s boundaries. Historically, bonds secured by such property taxes or certain types of assessments have generally been considered of high credit quality. However, the authority of an agency to impose, and to issue bonds secured by and payable from the proceeds of, such taxes and assessments is often strictly circumscribed by state law. See “Chapter 3: Types of Debt Instruments—Authority to Incur Debt.” As a result, agencies have recently tended to employ such financing vehicles only on rare occasions.

General Obligation Bonds. General obligation bonds are bonds secured by *ad valorem* property taxes levied and collected by the issuing agency for the purpose of paying the bonds. In California, general obligation bonds were a significant financing vehicle for California water and wastewater agencies prior to the passage of Proposition 13 in 1978, which added Article XIII A to the California Constitution. Many California agencies still retain statutory authority to issue general obligation bonds. By eliminating the ability to assess *ad valorem* property taxes, however, Proposition 13 effectively eliminated the ability of such agencies to issue new general obligation bonds. Article XIII A was subsequently amended, though, to allow the issuance of general obligation bonds under some circumstances.

Pursuant to Article XIII A, Section 1(b), general obligation bonds may be issued only to finance the acquisition or improvement of real property and must be approved by a two-thirds vote of the electorate. General obligation bonds are secured by property taxes that are levied throughout the jurisdiction of the agency in addition to the *ad valorem* property taxes levied on such property in accordance with the limits of Article XIII A. In addition to voter approval, general obligation bonds must satisfy any substantive or procedural requirements contained in the agency's governing statute. See "Chapter 3: Types of Debt instruments—Authority to Incur Debt."

Because general obligation bonds are secured by the pledge of an agency's taxing authority, they have generally been viewed as the best secured debt instruments from an investor standpoint and may have lower interest costs for the agency as compared to revenue bonds or lease financings. Another advantage of general obligation bonds from the agency's perspective is that the bonds carry with them a source of repayment over and above enterprise revenues. However, equity concerns may be raised in some financing structures as property taxes levied to pay general obligation bonds allocate the burden of capital costs to property owners generally as opposed to system users or new development. In addition, recent developments in federal bankruptcy law may affect investors' view of the credit quality of general obligation bonds. Such developments are outside the scope of this book.

The principal disadvantage of general obligation bonds from a financing standpoint is the voter-approval requirement. An election campaign can be expensive and the timeframe for the financing must often be greatly extended. Additionally, a two-thirds vote to raise taxes may be difficult to obtain in any but the most compelling circumstances.

Assessment Bonds. Assessment bonds are issued to finance capital improvements, and debt service on assessment bonds is paid from the proceeds of assessments levied upon real property specially benefited by such improvements and secured by a lien on such property. Assessments are collected by counties on the property tax roll. Most water agencies in California have authority to issue assessment bonds. Assessments may be levied under the Improvement Act of 1911 (the “1911 Act”), the Municipal Improvement Act of 1913 (the “1913 Act”), the Landscaping and Lighting Act of 1972 (the “1972 Act”) or an agency’s governing statute, and bonds may be issued under the 1911 Act, the Improvement Bond Act of 1915 (the “1915 Act”) or an agency’s governing statute. Assessment acts vary in terms of the particular items financeable and procedures to be followed. A generalized description of terms and procedures follows.

Assessment procedures may be initiated by the agency or by a property owner petition. The formation of an assessment district is proposed and a determination is made of the benefit provided by the proposed improvements. The assessment levied must be in proportion to the special benefit conferred upon the property assessed (generally as determined by a formula devised by an engineer or another qualified professional), and publicly owned parcels may not be exempted absent a showing that such parcels receive no special benefit. Public hearings must be held and the assessment may not be imposed if ballots submitted by affected property owners (weighted according to the proportional financial obligation of the affected property) in opposition of the assessment exceed ballots submitted in favor of the assessment.

Assessment districts are often formed in cooperation with a developer who owns all of the property to be assessed in order to finance improvements needed for development, in which case certain procedures can be streamlined. When the developer subsequently sells the developed parcels, they remain subject to the assessment lien. Assessment bonds may also be used to provide new or upgraded service for existing communities. Only that portion of a water or sewer system up to the property line may be financed.

One advantage of assessment bonds is that debt service is paid from a revenue source (assessments) over and above enterprise revenues. Moreover, with assessments the cost of new system improvements is borne by property owners in proportion to the special benefit they receive from such improvements. One substantial disadvantage to assessment bonds is that rating agencies are reluctant to evaluate land-secured debt, so assessment bonds are usually not rated.

Mello-Roos Bonds. Under California’s Mello-Roos Community Facilities Act of 1982 (the “Mello-Roos Act”), public entities such as water and wastewater agencies may establish a Community Facilities District (a “CFD”) and levy a special tax upon land within the specified geographical area constituting the CFD. The proceeds of the special tax are used to finance capital improvements or certain new services or to repay bonds issued for such purpose. A tax formula is developed, which may assess the tax on any reasonable basis (*e.g.*, special benefit, general benefit, cost of facilities or services) other than an *ad valorem* basis. The amount of the special tax need not relate to the special benefit provided to particular properties.

Mello-Roos taxes are very similar to assessments: they are collected through the property tax rolls and secured by a lien on the property. CFDs are also often formed in cooperation with a developer who owns all of the property to be taxed in order to finance improvements needed for development. Further, as with assessment bonds, Mello-Roos bonds are payable from a revenue source (special taxes) over and above enterprise revenues. In the case of Mello-Roos bonds, though, there is considerable flexibility to tailor the tax to appropriately allocate the burden of paying for the improvements. Mello-Roos bonds are also generally unrated.

The primary disadvantages of Mello-Roos Bonds are that the formation of a CFD is a complex and often lengthy process and, unless the proposed CFD has fewer than twelve registered voters and qualifies for a landowner election, two-thirds of the voters in the district must approve of its format—a requirement that may be difficult to satisfy.

Warrants. Many water and wastewater agencies have statutory authority to issue warrants. Warrants are of two varieties: revenue warrants and assessment warrants. Revenue warrants are similar to revenue bonds and assessment warrants are similar to assessment bonds. The particular substantive and procedural rules relating to warrants depend upon the specific terms of the agency’s governing statute.

CHAPTER THREE

Types of Debt Instruments

Water and wastewater agencies utilize a variety of debt instruments to finance capital improvements. Before discussing specific debt instruments, however, it is important to examine certain issues relating to an agency's authority to incur debt.

Authority to Incur Debt

General Authority.

A commonly invoked principle of municipal law, known as "Dillon's Rule," provides generally that the powers of public agencies are limited to (i) powers expressly granted by state law and (ii) powers which are necessarily implied by any such express grant of power.

In order to debt finance capital improvements, agencies must usually rely upon a grant of statutory authority by the state legislature or, in the case of utility enterprises established by city charters, authority provided under the city charter. Such powers may be express authorization to issue debt found in an agency's statute or charter, detailing the particular terms and methods by which the agency may issue specific types of debt obligations (e.g., the power to issue general obligation bonds, assessment bonds or revenue bonds pursuant to a resolution of the agency's governing board specifying certain terms of the bonds); or an agency may be capable of entering into transactions to finance capital improvements by relying on grants of more general powers (e.g., the power to buy and sell or lease property, which may enable an agency to effect certain types of installment sale or lease financings described in this Chapter).

Statutory Provisions: Bonds, Notes, Warrants. Agency governing statutes generally provide authority for the issuance of bonds and notes or warrants, and there are a number of general statutes granting bond issuance authority to public agencies,

including water and wastewater agencies. Bond and note or warrant statutes vary with respect to sources of payment for the debt, substantive requirements and procedural limitations.

Procedural Requirements. Once it has been established that an agency has the authority to finance capital improvements, either directly by issuing debt obligations or indirectly by entering into financing transactions relying on more general powers of the agency, the agency must determine the procedural requirements with which it is required to comply when issuing or entering into such debt obligations. Agency powers may be exercisable only in a prescribed manner, for example, by adopting a governing board resolution or enacting an ordinance approving the transaction or certain terms thereof. Public hearings and applicable notices may be necessary, and the approval of other government entities may also be a precondition to an agency incurring debt obligations. Some types of agency debt may be sold through a negotiated sale, while other types must be sold competitively. See “Chapter 4: The Financing Process.” Agencies may need to comply with certain federal, state and local environmental laws or other contractual obligations or grant requirements prior to financing certain projects.

State Law Debt Limitations. In addition to compliance with applicable procedural requirements for issuing debt, water and wastewater agencies must also comply with state laws governing the incurrence of debt obligations generally. Although each state’s constitutional and statutory requirements governing the incurrence of debt by local agencies vary somewhat, in many states such laws share certain common features, for instance: (i) a requirement that voters approve of, or landowners consent to, the issuance of long-term debt; (ii) a prohibition against public guarantees of private entities’ obligations or against public agencies investing in equity securities of private corporations; or (iii) a limit (expressed in terms of an aggregate dollar figure or a percentage of the assessed valuation of property within the jurisdiction of the agency) on the total amount of debt that a particular agency may issue or have outstanding at any one time. Thus, even if a water or wastewater agency generally has authority to engage in transactions to finance capital improvements and can comply with relevant procedural requirements, it may nevertheless be unable to consummate such a transaction unless the agency can either comply with state law limits on the incurrence of debt or identify an applicable exception to such limits.

As one example of this common state law hurdle to incurring debt, Article XVI, Section 18 of the California Constitution prohibits cities and counties from incurring indebtedness payable from future years' revenues without two-thirds voter approval, subject only to exceptions such as those described below. While this constitutional limit is not directly applicable to non-municipal water and wastewater agencies, similar debt prohibitions may be found in agencies' legislatively enacted governing statutes. The applicability of such debt limits to specific agencies and financings will vary depending upon a number of circumstances and must therefore be considered in the context of such financings.

Debt Limit Exceptions. Identifying and understanding exceptions to debt limits is particularly important if such limits would otherwise make financing necessary capital improvements impractical. Exceptions to debt limits often rely more on the form of a transaction than on its economic substance. Under California law, there are several judicially-created exceptions to the constitutional debt limitation, with the special fund exception (or, as it is sometimes called, the revenue bond exception) being the most relevant to water and wastewater agency financings. The special fund debt limit exception allows for the incurring of debt that is payable solely from a source other than an agency's general fund so long as there is a nexus between the purpose for which the debt was incurred and the source of its repayment. Thus, the exception would apply if the debt financed improvements to a water enterprise and were payable solely from the revenues of that water enterprise.

The lease financing debt limit exception in California may be of value if the agency wishes to make payments on debt from the agency's general fund or the nexus requirement of the special fund exception cannot be satisfied. The theory behind the lease financing exception is that, in leasing property, the agency is each year simply making payments for value received in that year, namely occupancy of the leased property. To make use of the lease financing exception, an agency will enter into a long-term lease agreement with another entity which assigns its rights to receive lease payments under the lease to a trustee. The trustee in turn issues certificates of participation evidencing fractional rights in the lease to investors. Alternatively, if the lessor is a governmental entity, such as a joint powers authority, it can issue bonds secured by the agency's lease payments. An agency may either lease the property to be financed or obtain funds for unrelated capital expenditures through the sale or lease and leaseback of existing property (an "asset transfer" or "equity strip"). For the lease

financing exception to apply, however, the terms of the lease must generally provide for (i) rent no greater than “fair rental value” of the property leased, and (ii) abatement in the event the agency does not have use and occupancy of the property at any time during the term of the lease. Additionally, the lease must preclude the acceleration of lease payments for any reason. Similar forms of contingent obligations may also provide relief from debt limits in certain circumstances.

To illustrate the impact of variations in the formal elements of financing structures, compare, for example, two common capital improvement financing structures:

- (i) enterprise revenue bonds issued to finance the acquisition of property and secured by a pledge of net enterprise revenues, and
- (ii) an installment sale agreement for the acquisition of property secured by a pledge of net enterprise revenues.

Both financing structures accomplish the same agency purpose: the acquisition of the property in question; both establish similar obligations of the agency: payment of principal and interest; and both provide debtholders with essentially the same security: a pledge of enterprise revenues. The issuance of revenue bonds pursuant to an agency’s statutory power to issue bonds, however, may require voter approval and competitive sale, while entering into an installment sale agreement based upon the agency’s general power to purchase property may allow for the sale of certificates of participation or joint powers authority revenue bonds at negotiated sale without voter approval. In choosing among forms of indebtedness, then, an agency must carefully consider its authority to incur such indebtedness, the substantive limitations on and the procedural requirements for such incurrence. The form/substance distinction found when construing typical debt limitations may often allow an agency to accomplish its purposes one way but not another, or indirectly if not directly. It is therefore essential that an agency engage a strong, experienced financing team in order to assist it in developing the most efficient financing structure possible given the debt-related authority and limitations applicable to the agency under state law or charter.

Enterprise Financings: Revenue Bonds and Installment Sale Agreements

Revenue Bonds. Historically, revenue bonds were the traditional source of financing for revenue-producing enterprises such as water and wastewater agencies. Most California water and wastewater agencies have revenue bond issuance authority written into their governing statutes, and the authorizing provisions of the California Revenue Bond Law of 1941 may also be available to these agencies.

The basic financing considerations with respect to revenue bonds are those for enterprise borrowing discussed in Chapter 2. Revenue bonds are issued to fund capital improvements. Debt service on revenue bonds is paid from, and secured by, a pledge of the gross or net revenues of the enterprise. Investors tend to view bonds secured by enterprise revenues as lower risk than most other types of obligations (with the possible exception of general obligation bonds, discussed in Chapter 2), reasoning that users must pay utility rates set at a level to cover operations of the enterprise, including debt service on revenue bonds, or else face termination of critical services. Additionally, because revenue bonds finance capital improvements to a water or wastewater enterprise and are generally secured solely by revenues of such enterprise, they qualify for the special fund debt limit exception to constitutional debt limitations.

The principal disadvantages of revenue bonds are that agencies' authorizing statutes frequently contain their own voter approval requirements for the issuance of bonds (usually majority vote), and old bond statutes often limit flexibility with respect to the structuring of debt service (*e.g.*, requiring semiannual payment of interest), the structure of the bond issue itself (*e.g.*, restricting the amount of original issue premium or discount to levels that may be less than optimal, or too narrowly restricting the purposes for which bond proceeds may be used) or the manner of sale of the bonds (*e.g.*, requiring competitive sale). These restrictions may make the issuance of revenue bonds impracticable for an agency: election campaigns are frequently expensive, and the timeframe for a financing must often be greatly extended to accommodate election-related logistics; at any given time the market may require bonds to have certain levels of original issue premium or discount to achieve the lowest overall yields; or an agency may determine that a negotiated sale would provide better results for the financing given existing circumstances. As a result of these concerns, revenue bonds have been in large measure displaced by installment sale agreements as tools for water and wastewater agency financings.

Installment Sale Agreements. Water and wastewater agencies are generally authorized to purchase property for agency purposes without limitation. Through an installment sale agreement, an agency may finance the acquisition of real property, improvements to real property or the acquisition of equipment. “Soft costs” (e.g., architecture and engineering costs) associated with tangible property may generally be financed as well. In an installment sale agreement, the seller agrees to acquire or improve the property using bond or certificate of participation proceeds and sell the property to the agency. The agency makes installment payments (consisting of principal and interest) and pays all other expenses associated with the financing and the property. The obligation of the agency to make such payments is “unconditional” in the sense that the agency must make payments regardless of whether or not the property is usable or of value to the agency.

An agency may enter into an installment sale agreement directly with the vendor providing the property to the agency. Alternatively, an installment sale agreement can be a vehicle for a public borrowing. In this case, bonds payable from amounts paid by the agency under the installment sale agreement are issued and sold to investors or certificates of participation representing rights to receive amounts paid by the agency under the installment sale agreement are executed and sold to investors.

Installment Sale Agreement Financings: Revenue Bonds. In an installment sale revenue bond financing, an agency enters into an installment sale agreement with a joint exercise of powers agency (a “JPA”) or other financing entity, which in turn issues bonds payable solely from the installment sale payments the agency makes to the financing entity pursuant to the installment sale agreement. The basic security for investors in an installment sale agreement revenue bond financing is the obligation of the agency to make installment payments from enterprise revenues pursuant to an installment sale agreement. From a financial standpoint, an installment sale agreement payable from enterprise revenues is the functional equivalent of a revenue bond.

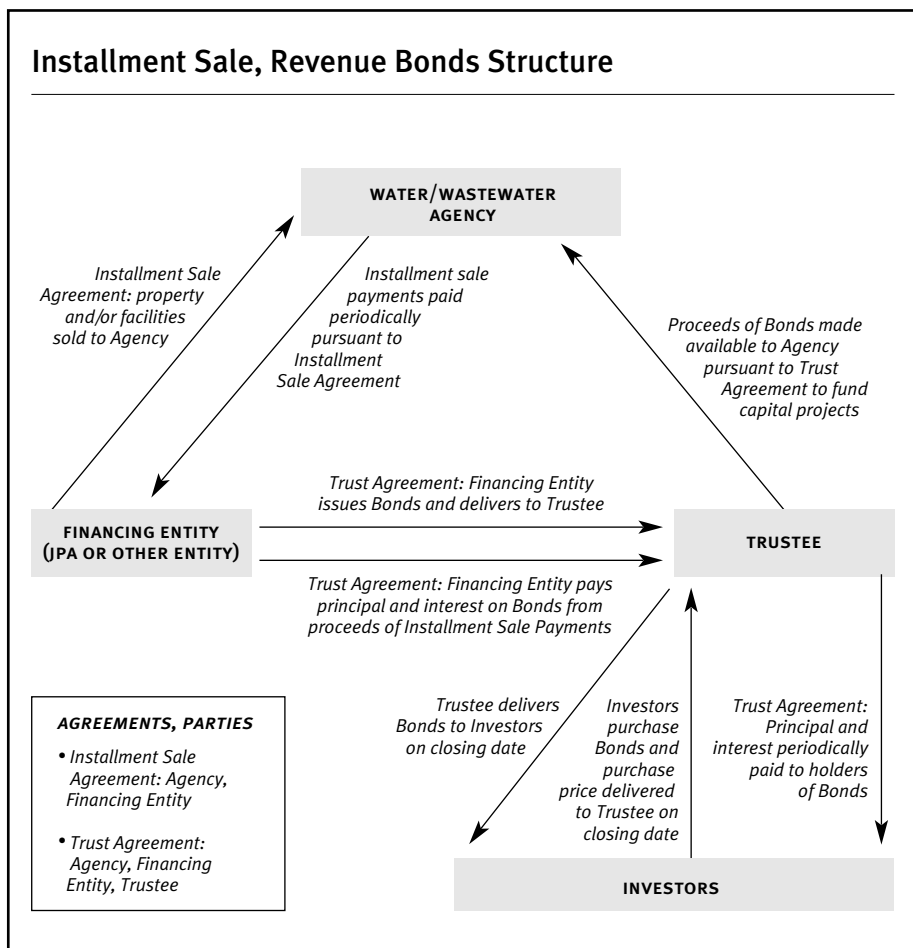
The financing entity that issues bonds in an installment sale revenue bond financing can be a nonprofit corporation or a JPA; however, because of certain tax and state law restrictions applicable to nonprofit corporations, most installment sale revenue bonds are now issued by JPAs. JPAs are authorized by California’s Marks-Roos Local Bond Pooling Act of 1985 to issue revenue bonds and to lease and sell

property, all in furtherance of the financing of public capital improvements. JPAs may be formed by two or more public entities. If a separate public entity exists that has the same governing board members as the agency or if the agency has a good working relationship with another public entity, then a JPA can easily be established by such entities. If, however, no JPA partner is readily available, the agency may need to seek out a JPA not under its control or cause the formation of a non-profit corporation to be the financing entity.

Typically, the agency's obligation to make installment sale payments under the installment sale agreement is secured by a pledge of gross or net revenues from the agency's water or wastewater enterprise, as applicable. The installment sale itself may be structured as a sale-sale back transaction in which the agency sells a specific property to the JPA (the sale price, consisting of the bond proceeds), and the JPA in turn sells the property back to the agency in exchange for the agency's agreement to make installment sale payments. Proceeds of installment sale revenue bonds are used by the financing entity to design, acquire or construct the property to be sold to the agency, to fund a reserve fund for the bonds, to fund interest on the bonds during construction and to pay costs of issuance. The financing entity generally appoints the agency to act as its agent for such design, acquisition and construction, so the agency effectively has the same use of the bond proceeds as if it had borrowed funds directly.

Debt service on the bonds is structured to match principal and interest payments to be made by the agency under the installment sale agreement, and the bonds are payable solely from such agency payments and other amounts held under the indenture for the bonds, such as the debt service reserve fund or amounts for capitalized interest. The bonds are secured by an assignment to the bond trustee of the financing entity's rights under the installment sale agreement, and the agency is required to make installment payments directly to the trustee. It is important to note, however, that in almost all transactions neither the JPA nor investors hold a mortgage, lien or other encumbrance on the property being purchased and sold; rather, payments are secured solely by the pledge of the agency to make payments from gross or net enterprise revenues. In fact, installment sale agreements generally allow an agency to substitute other property for the property originally purchased. Substitution is often expressed in terms of the purchase of property determined by the agency to be of equal benefit to the enterprise.

Installment Sale, Revenue Bonds Structure



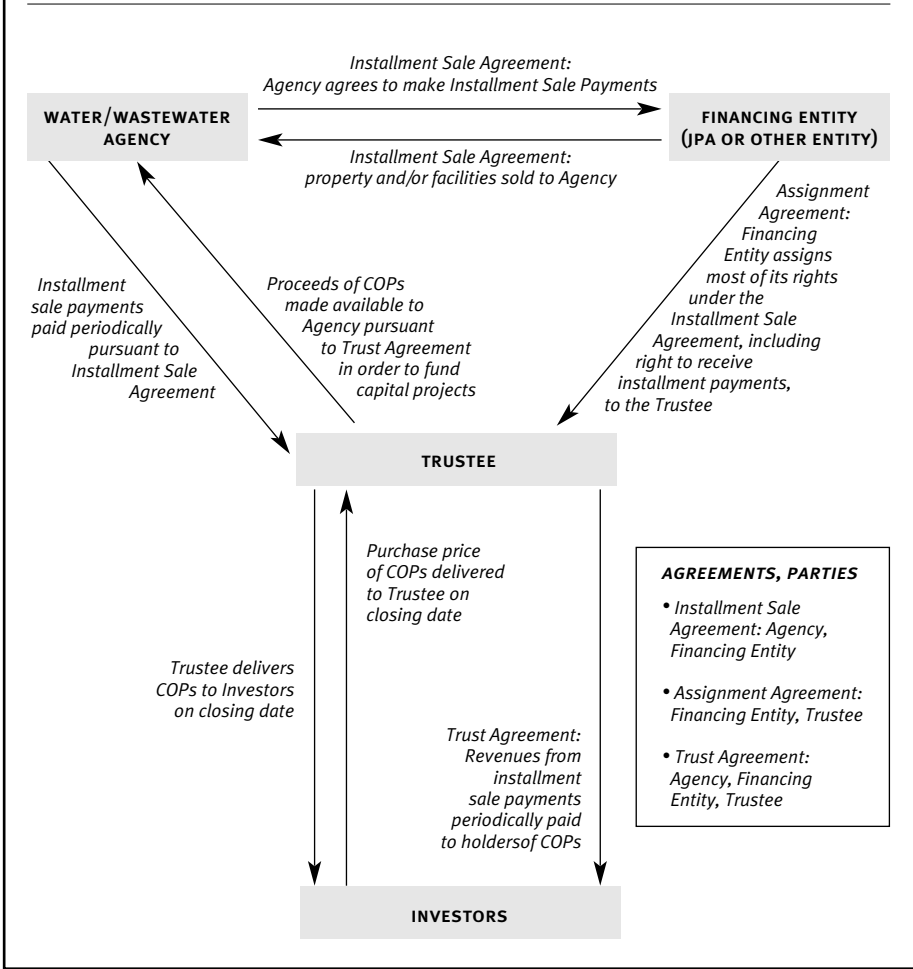
The primary advantage of installment sale revenue bonds is that agencies may cause the issuance of such bonds without being forced to comply with the procedural requirements for issuing debt found in their bond statutes. In addition, because most installment sale revenue bond transactions are structured as a special fund obligation, financing capital improvements relating to a water or wastewater enterprise with installment payment obligations being paid solely from the gross or net revenues of such enterprise, they are generally exempt from constitutional and statutory debt limits applicable to an agency. Finally, because installment sale revenue bond financings include pledges and security features similar to those found in revenue bond financings, there is generally little or no interest cost penalty associated with installment sale revenue bond financings as compared to standard revenue bond financings.

Installment Sale Agreement Financings: Certificates of Participation. Installment sale agreement certificates of participation financings vary in structure only modestly from installment sale agreement revenue bond financings. In a certificate of participation financing, the financing entity enters into an installment sale agreement with the agency. Rather than issue bonds, however, the financing entity assigns its right to receive installment payments to a trustee (often, together with all of its other rights under the installment sale agreement except its rights to receive indemnification and payment of its expenses). The trustee then executes and delivers certificates of participation representing interests in such installment payments (including principal and interest components) and the certificates are sold to investors. Certificate proceeds are used by the financing entity to design, acquire or construct the property to be sold to the agency, to fund a debt service reserve fund for the certificates, to fund interest during construction; and to pay costs of issuance. Agency arrangements similar to those described above for installment sale revenue bonds are also employed.

Debt service payments with respect to the certificates of participation match, and in fact represent, installment payments made by the agency under the installment sale agreement. Similar to the case of installment sale revenue bonds, the obligations evidenced by the certificates are also secured by other amounts held under the trust agreement pursuant to which the certificates are delivered. The agency is required to make installment payments directly to the trustee.

The principal advantage offered by the certificates of participation structure is the flexibility it offers with respect to the identity of the financing entity. For agencies that are not able to establish a JPA with another public entity, the certificates of participation structure may be an attractive alternative. In most other cases, however, the disadvantages inherent in certificates of participation structures outweigh any advantages they have over installment sale revenue bonds. First, publicized problems with certificate of participation transactions (even if entirely unrelated or in another state) sometimes make certificates of participation less attractive to investors than bonds, resulting in increased financing costs for such transactions. Second, certificates of participation structures are even more complex than installment sale agreement revenue bonds structures and, therefore, are more difficult to document and explain to nonexperts.

Installment Sale, Certificates of Participation Structure



Lease Financings: Lease Revenue Bonds and Certificates of Participation

Lease financings are generally structured similarly to installment sale agreement financings. The agency enters into a lease agreement with (i) a participating financing entity that issues bonds, or (ii) a financing entity that assigns its rights to a trustee, which in turn issues certificates of participation to investors. The primary structuring difference between installment sale agreement financings and lease financings is that in lease financings the agency’s payment obligations are evidenced by base rental payments due under a lease agreement instead of installment payments under an installment sale agreement.

Through a lease financing, an agency may finance the acquisition of real property, improvements to real property or the acquisition of certain types of personal property (generally referred to as “equipment”). In the most common form of lease financing, the lessor agrees to acquire or improve the property using bond or certificate of participation proceeds and lease the property to the agency for a term of years. The agency makes base rental payments (consisting of principal and interest components) and pays all other expenses associated with the financing and the property. The agency obtains title to the property upon completion of the lease term or when all rent has been paid.

Another form of lease financing is an “asset transfer” or “equity strip.” In this case the agency sells or leases an existing property owned by the agency to the lessor for a lump-sum payment equal to the bond or certificate of participation proceeds and leases the property back from the lessor unchanged, paying base rental over a period of years. The proceeds of the sale or lease-out are used by the agency to pay for other capital improvements. Thus, the property subject to the lease is not improved and the property or improvements financed are not subject to the lease.

The basic security for investors in a lease financing is the ability of the agency to make lease payments either from its general fund, if the lease is so payable, or from enterprise revenues. Unlike installment sale agreements, lease financings provide investors with a limited interest in the property leased—the right to relet the property during the term of the lease in case of a default by the agency, which right may be of some value. This right is counterbalanced, however, by the fact that one of the requirements of the lease financing exception to the California debt limit is that the lease be structured as an actual lease—that is, as payments by the agency in each fiscal year for a benefit conferred upon the agency in such fiscal year, namely, the beneficial use of the leased property, so that the lease must not allow for the acceleration of base rental payments in the event of a default by the agency (*i.e.*, principal cannot be declared immediately due and payable) and, if the agency does not have use and occupancy of the property, rent must be abated (*i.e.*, the agency cannot be legally obligated to pay rent during such periods except from a debt service reserve fund or insurance proceeds). As in installment sale financings, leases also generally allow an agency to substitute other property for the property originally leased. However, since investors have an interest in the leased property, lease financings often include “essentiality” requirements for such substitutions in order to provide comfort to investors.

Lease financings offer agencies significant flexibility in avoiding onerous statutory procedural requirements for issuing debt obligations and avoiding state law debt limit restrictions in those instances in which the special fund exception is not available (because the property financed does not benefit an enterprise or because debt service is not payable solely from enterprise revenues). Characteristics specific to lease financings are, however, of concern to investors. The lack of an acceleration remedy, for example, deprives investors of considerable leverage to compel payment in a default situation. Risk of abatement in the event of a casualty loss or condemnation and a subsequent suspension of repayment or, in certain cases, non-completion of the project, also increases the overall level of risk to investors in a lease financing. Some of these risks can be addressed by completion and surety bonds, capitalizing interest to a date later than the expected completion date and through casualty, rental interruption and title insurance. Nevertheless, these concerns often result in a lower rating on lease financing debt than would be warranted by the agency's credit and increases in interest and other financing costs to the agency. For these reasons, lease financings are much less common than installment sale agreement financings.

Intergovernmental Borrowings

The State of California Department of Water Resources and the State Water Resources Control Board administer a variety of loan programs for water and wastewater projects, including programs established by various State of California bond acts. The State Water Resources Control Board also manages the State Revolving Fund Loan Program for the financing of wastewater facilities. In addition, rural agencies may be eligible for loans from the United States Department of Agriculture, Rural Development. A discussion of the particulars of these programs is beyond the scope of this book.

Variable Rate Debt

Fixed rate debt bears interest at rates determined when the debt is incurred. The value of fixed rate debt will vary as prevailing interest rates increase and decrease following its initial issuance. The interest rates applicable to variable rate debt obligations change periodically to match the rates which would allow the debt, if sold on such date, to have a market value of par or to track an interest rate index. The interest rate on variable rate debt at any particular time depends upon prevailing market rates, the term of the debt in the hands of the holder (*i.e.*, the

earliest date on which the debt may or must be tendered by the holder for purchase at par) and credit and liquidity considerations.

Whether debt is fixed rate or variable rate is an issue separate from its formal structure (as bonds or certificates of participation). A variable interest rate is not viable, however, for obligations like general obligation bonds or assessments which depend for payment upon a fixed levy. Also, bond statutes are often not written with variable rate debt in mind, and may therefore provide insufficient flexibility to issue such obligations.

Variable rate debt can be in any of several basic formats, with tender bonds, commercial paper and indexed debt being the most common. With tender bonds, the holder of the debt has a periodic right to tender the bonds for purchase at par, and bonds tendered are remarketed at par to new purchasers and, if they cannot be remarketed, are purchased with the proceeds of a liquidity facility. Interest rates on tender bonds vary on a periodic basis (*e.g.*, daily, weekly, monthly, quarterly, semiannually, annually or only every several years) and this period can usually be adjusted or even converted to a fixed rate pursuant to the terms of the bond documents. Tender bonds generally require support from a letter of credit or liquidity facility to provide funds for the purchase of tendered bonds that cannot be remarketed.

In a commercial paper program, notes are issued that mature in 270 days or less. New commercial paper notes are generally issued to pay maturing notes with such “rolls” producing, in effect, a variable rate debt obligation. Commercial paper programs also generally require support from a letter of credit or liquidity facility to guarantee payment of notes at maturity in the event of a failed roll.

The principal advantage of variable-rate debt is the opportunity for agencies to pay a lower interest cost on debt.

Indexed debt is the typical structure for a commercial bank loan, the index frequently being determined by the bank’s prime rate adjusted by a spread factor (*e.g.*, prime plus ‘X’ percent). Because the holder has no tender rights, indexed debt bears interest at a higher rate than other forms of variable-rate debt and is, therefore, uncommon outside of a bank loan context.

The principal advantage of variable-rate debt is the opportunity for agencies to pay a lower interest cost on debt. Except under unusual market

conditions, short-term interest rates are lower than long-term interest rates for debt of comparable credit quality. If interest rates remain constant, the agency will generally have significantly lower interest cost on variable-rate debt than on fixed-rate debt, even taking into account remarketing and liquidity facility costs. Also, if interest rates decline, the agency will benefit from lower interest costs without the necessity or cost of a refunding. Variable-rate obligations also generally incur lower initial underwriting costs. Finally, while fixed-rate debt often has periods in which the principal may not be paid prior to maturity (“call protection”), variable-rate obligations generally provide agencies the flexibility to call debt at any time for any reason, including refundings or restructurings.

The principal disadvantage of variable-rate debt is interest rate risk: the risk that interest rates may rise in the future. Because future interest rates are unknown, the cost of capital improvements financed with variable-rate debt is not determinable for revenue planning purposes, so the agency is more likely to have to make unanticipated rates and charges adjustments. In addition, unanticipated changes in the ratings or perceived creditworthiness of liquidity providers, disruptions in capital markets and threats to the legality or tax exemption of the variable rate debt may cause holders to tender their bonds, resulting in higher interest costs on remarketing or failed remarketings, which may subject the obligations to even higher rates of interest contractually specified in documents relating to the letter of credit or liquidity facility. Finally, if the agency’s credit declines or the liquidity facility market changes (*i.e.*, providing liquidity facilities is no longer an attractive business, perhaps because of regulatory changes or disruptions in the capital markets), the agency may need to pay significantly higher fees to the provider to obtain an extension or renewal of or replacement for an expiring liquidity facility or may not be able to obtain such an extension or replacement at all. If a liquidity facility expires without extension, renewal or replacement, the agency must convert the debt to fixed rate (which may not be attractive based on then prevailing interest costs) or have the debt purchased by the liquidity facility provider and face a workout situation.

The principal disadvantage of variable-rate debt is interest rate risk: the risk that interest rates may rise in the future.

Credit Enhancement

Credit enhancement involves the provision of additional security for an agency's debt through a credit facility (such as a bond insurance policy or letter of credit) providing for the timely payment of debt service to debtholders whether or not such amounts are paid by the agency. With credit enhancement, investors can look for payment to the agency or the credit enhancement provider. The credit enhancement provider assumes the credit risk on the debt and steps into essentially the same position as investors with respect to the need for covenants and remedies to protect its interests.

Types of Credit Enhancement. The most common types of credit enhancement are letters of credit (for variable-rate debt) and bond insurance (for fixed-rate debt), though use of bond insurance has decreased with the decline in the financial condition of most bond insurers. Letters of credit are issued by highly rated banks and may be drawn upon by the bond or certificates trustee to make payments on the debt, with amounts paid by the agency as debt service either being used to reimburse the bank for such draw or to offset the need for such a draw, or to pay the purchase price of variable-rate bonds tendered but not remarketed. If any advance by the bank is not immediately reimbursed, the agency must pay interest to the bank at a contractually set rate (*e.g.*, prime plus 'X' percent) that is usually higher than the interest rate on the debt (and may increase over time). For agencies with a strong credit, a standby bond purchase agreement, pursuant to which a liquidity provider advances funds to purchase bonds tendered but not remarketed but does not provide credit to cover agency payment defaults, is an alternative.

With bond insurance, an insurance company approved to insure municipal bonds issues a policy insuring timely payment of principal and interest on the debt. The bond insurer pays scheduled principal and interest on the debt (but not purchase price of variable-rate debt upon tender thereof by holders—this must be covered by a liquidity facility) in the event payments are not made by the agency. Following any such payment, the bond insurer steps into the shoes of the debtholder with respect to rights to receive payments of principal and interest on the obligation from the agency.

Credit Enhancement Situations. Water and wastewater agencies often use credit enhancement to achieve debt service savings. With credit enhancement, an agency's debt can be rated based upon the credit rating of the credit enhancement provider. For variable-rate debt, except from water and agencies with strong credit and large cash balances, credit enhancement or at least liquidity support is required. For fixed-rate debt, although the underlying credit of the agency is still of interest to investors, credit-enhanced debt is more secure and more highly rated and can therefore be sold to investors with a lower interest rate. If, on a present value basis, the interest cost saved by reason of credit enhancement is greater than the cost of obtaining the credit enhancement, the agency enjoys a debt service savings.

CHAPTER FOUR

The Financing Process

Water and wastewater agencies have diverse capital funding needs as a result of the unique set of circumstances each agency confronts in providing services to its ratepayers. Therefore, the financing process and the composition of financing teams can vary significantly across transactions—even for a single agency. The goal of any financing should be to produce the most advantageous result for the agency, while accounting for the particular, often limited, role each participant plays in the financing process. This chapter discusses the roles of common participants in financing teams, describes several methods that water and wastewater agencies typically employ to sell bonds and other debt instruments, and outlines the major transaction milestones found in most financings.

The Financing Team

A strong, experienced financing team is essential for successful water and wastewater agency debt financings. Because agencies are ultimately responsible for their debt issues (whether bonds, notes, warrants or certificates of participation, referred to herein as “bonds”) and are exposed to risk of liability in a variety of ways during and following issuance of their bonds, agencies should exercise special care in selecting financing team members to ensure that all participants are professionals of the highest rank in reputation, experience and ability. In addition to the agency, financing teams may include bond counsel, one or more underwriters, a financial advisor, disclosure counsel, a bond trustee and others.

The Agency. The agency, as the issuer of the bonds, plays the central role in any financing. The agency and its officers are responsible for selecting the financing participants, ensuring that the bond issue is integrated with the agency’s overall financial management plan, approving the structure of the bond issue, reviewing and approving all documentation relating to the bond issue and, once the bonds

are issued, administering the investment and expenditure of the proceeds of the borrowing, causing debt service payments to be made in a timely manner and making required tax and disclosure filings.

Bond Counsel. Bond counsel works with the agency, its financial advisors and the underwriters to develop a structure for the financing. The structure should not only address the immediate financing needs of the agency, but should also retain sufficient flexibility to allow the agency to meet future financing needs, both anticipated and unanticipated. In their role as bond counsel, attorneys draft financing documents, review documents prepared by other members of the financing team and coordinate the progress of the financing in a manner that ensures that all legal requirements essential to validity of the debt are satisfied. It is essential that bond counsel be thoroughly familiar with relevant constitutional and statutory authorities and the procedural requirements and other legal restrictions, including the complex federal tax law requirements pertaining to tax-exempt financings, applicable to the agency and the particular financing technique to be employed.

Bond counsel renders an opinion that the bonds and the principal financing documents are valid and binding obligations of the agency and, if applicable, that interest on the bonds is tax-exempt. Bond counsel's opinion as to the validity, enforceability and tax-exempt status of the bonds is essential for the completion of the transaction and is viewed by investors as a key part of any transaction. The municipal bond market requires that firms rendering bond counsel opinions be nationally recognized for their expertise in municipal finance.

Because agencies are ultimately responsible for their debt issues and are exposed to risk of liability in a variety of ways during and following issuance of their bonds, agencies should exercise special care in selecting financing team members to ensure that all participants are professionals of the highest rank in reputation, experience and ability.

Underwriter. An underwriter, either an investment banking firm or the capital markets group of a bank, underwrites the bonds by purchasing the debt from the agency and reselling them to investors. Such purchase and sale of the agency's debt may either be on a negotiated basis, in which the agency chooses one or more underwriters and negotiates the price and certain terms of the bonds directly with them, or through a competitive sale in which one or more underwriters bid for the bonds and the underwriter with the winning bid purchases the bonds from the agency and resells them to investors. In negotiated transactions, one or more of the underwriters generally take an active role in helping structure the transaction and may perform some or all of the tasks otherwise within the purview of the financial advisor. Finally, for variable-rate bonds, underwriters will generally serve as remarketing agents, periodically setting the interest rate paid to investors by the agency and, following tender thereof, placing the bonds with new investors.

Financial Advisor. The financial advisor is a professional consultant employed by the agency to assist it in implementing the financing. The financial advisor might help develop the agency's financing goals, analyze and make recommendations about financing techniques and various alternative financing strategies, and assist in structuring the financing to meet such goals.

If the bonds are to be sold by competitive sale, the financing team will almost certainly include a financial advisor who will assist the agency with the logistics involved in the sale process, including preparing the notice of sale setting forth relevant bid parameters for the underwriters. If the bonds are to be sold by negotiated sale, the underwriter sometimes undertakes certain activities that would otherwise be performed by a financial advisor. However, even in a negotiated sale, the agency may retain a financial advisor to advise the agency on financial issues, to coordinate the financing or to assist in negotiating the terms of the sale of the bonds with the underwriter.

Disclosure Counsel. Because disclosure to investors concerning an agency's debt obligations carries with it the potential for securities law liability for both the issuing agency and, in some instances, its board, officers and others it is important that such disclosure be accurate and correct in all material respects, and also free of omissions that would render the disclosure misleading. In order to obtain advice concerning compliance with securities law, agencies often employ a law firm to act as disclosure

counsel. Disclosure counsel oversees the preparation of the official statement for the debt, advises the agency on disclosure-related issues, drafts a continuing disclosure agreement relating to certain ongoing disclosure obligations the agency may undertake, assists and advises with respect to the due diligence process, and provides an opinion to the underwriter of the bonds concerning the official statement.

Agency Counsel and Underwriter's Counsel. Agency counsel reviews the financing documentation and often negotiates certain aspects of the transaction on behalf of the agency. In addition, agency counsel prepares certain opinions relating to the ability of the agency to issue the bonds and enter into related agreements.

In a negotiated sale, the underwriter will usually employ its own counsel to review the financing documentation and advise the underwriter with respect to securities law requirements. Underwriter's counsel generally prepares the purchase contract between the underwriter and the agency, specifying the terms of the purchase of the agency's debt by the underwriter, and would generally prepare the official statement for the debt offering in those instances where the agency chooses not to engage disclosure counsel.

Trustee. The trustee, fiscal agent or paying agent is responsible for carrying out administrative functions under the financing documents. Such functions may include establishing and holding the funds and accounts relating to the debt issue; authenticating the bonds; maintaining a list of owners and registering the transfer or exchange of the bonds; paying principal of and interest on the bonds to the owners; and protecting the interests of the owners in the event of a default by the agency.

Rebate Compliance Provider and Other Participants. The rebate compliance provider is an outside expert, usually a bond counsel or accounting firm, who provides the arbitrage rebate calculation services necessary to ensure compliance with federal tax law. The rebate compliance provider is an important member of the financing team and should be engaged by the agency at or prior to the time of the bond issuance.

Water and wastewater agency financings may also involve a liquidity or credit enhancement provider and its counsel or a seller or lessor and its counsel. An agency will also often retain an engineering firm or other feasibility consultant to analyze the technical feasibility of the project to be financed or the overall revenue-producing capability of the enterprise, especially in financings involving existing debt in which

security agreements require that technical feasibility and/or debt service coverage projections be certified by an engineering firm prior to the agency's issuance of additional bonds. If an election is required, an election consultant may be retained; if assessment bonds are issued, a firm must be engaged to do benefit calculations; and if Mello-Roos Bonds are issued, a special tax consultant may be needed.

Negotiated Sale or Competitive Sale?

The two basic methods for selling water and wastewater agency bonds are through negotiated sale and through competitive sale, and each has certain advantages. In most financings, the agency may choose the method of sale; however, some agencies' statutes require bonds be sold at competitive sale and conversely, as a practical matter, variable-rate debt and most derivative products can only be sold through a negotiated sale process.

In a negotiated sale, the agency selects one or more underwriters with whom to negotiate the purchase of the bonds from the agency (for ultimate resale to investors). The agency works with the underwriter, bond counsel and, if the agency employs one, a financial advisor to structure the transaction. The underwriter is often represented by counsel who will likely take the lead role in preparing or overseeing production of the offering materials for the bonds unless the agency engages separate disclosure counsel. On the date set for pricing of the bonds, the agency enters into a bond purchase contract with the underwriter pursuant to which the underwriter agrees to accept delivery of and pay for the bonds on a specified date in the near future on the terms and conditions contained in the contract. Prior to entering into the purchase contract, the underwriter has generally obtained commitments from investors for the purchase of most or all of the bonds. In a negotiated sale, the underwriter generally buys the bonds at a discount from the price at which the underwriter expects to resell the debt to investors and this "underwriter's discount" or "spread" is the principal form of compensation derived by the underwriter for its underwriting services.

In a competitive sale, the agency works with its financial advisor and bond counsel to structure the transaction. A notice of sale is published inviting bids for the bonds, specifying the terms of the offering and detailing the basis for the award of the bonds (generally the lowest "true interest cost," a metric that accounts for the interest rate to be paid on the debt obligations by the agency, as well as other one-time premiums, discounts and fees paid by or to the agency in connection

with the initial sale of the obligations). The bonds are sold to the winning bidder, which may be a single underwriting firm or a syndicate of firms, generally on an “all or none” basis, though the notice of sale can specify that awards will be made on a maturity-by-maturity basis. Thus, in a competitive sale, underwriters purchase the bonds from the agency and resell them to investors but do not play an active role in structuring the transaction. The underwriter is generally compensated by being paid an “underwriter fee” from the agency; or through reselling the bonds to investors for more than the purchase price; or some combination thereof.

A variation on the negotiated sale is a “private placement,” in which the bonds are sold by the agency directly to an investor or investors. For more information concerning private placements, see “Private Placements and Direct Loans” below.

Advantages of a Negotiated Sale. The benefits to agencies of negotiated sales may include structuring assistance, presale marketing and additional flexibility in the transaction structure and timeline. Involving an underwriter and underwriter’s counsel early in a transaction can help the agency craft a superior structure for its financing, as the underwriter may be familiar with innovative techniques employed by similar issuers in recent debt issues and will, in any case, bring additional creativity and perspective to the table when the agency considers its structuring options. In addition, because the underwriter in a negotiated sale knows it will be able to purchase the agency’s bonds, it can work with potential investors to provide information and otherwise generate interest in, and feedback on, the offering prior to the offering date. This is of particular value if the transaction is complex or the agency’s credit is weak or difficult to understand. The underwriter can also obtain commitments from investors to purchase the bonds before determining the yields on the bonds, which may eliminate much of the underwriting risk and result in better pricing for the agency. Finally, a negotiated sale makes last-minute adjustments to debt structure or sale timing easier, giving the agency additional flexibility to respond to investor feedback and short-term market fluctuations. Such flexibility is of particular value for

The benefits to agencies of negotiated sales may include structuring assistance, presale marketing and additional flexibility in the transaction structure and timeline.

unusual borrowings and in volatile markets or for financings involving a number of independent variables (e.g., an advance refunding hinging upon the interplay of taxable and tax-exempt yield curves).

The principal advantage of a competitive sale is competitive pricing of the bonds.

Advantages of a Competitive Sale. The principal advantage of a competitive sale is competitive pricing of the bonds. The agency will sell the bonds upon the terms of the best qualifying bid (i.e., the bid that offers the lowest overall debt service cost to the agency, in addition to any other specified factors). Some statutes even require that agencies' debt be sold competitively, based on the premise that competition should produce the most cost-efficient result. In addition, a competitive sale offers

an open field and the agency avoids the potential political pitfalls of an underwriter selection process, though such sales may favor larger, national brokerage firms who have the ability to retain a larger percentage of the bonds in inventory for a longer period of time in order to compensate for the lack of presale opportunities.

Financing Documents

The number and type of financing documents required in any transaction will vary depending upon a variety of considerations: statutory or other legal requirements, the type and character of the debt obligations to be issued, the collateral or revenue streams available to be pledged as security for the agency's obligations, the types of facilities and projects being financed, the anticipated duration of the financing and whether any debt obligations of the agency are outstanding at the time of issuance, among others. Regardless of the number and type of documents employed, however, it is important to keep in mind that the agency may be subject to the terms of the documents for an extended period of time (in some cases up to forty years). Consequently, agency staff should expend the time and effort necessary to understand and become comfortable with the financing documentation and the agency should retain professionals of the highest quality to draft, review, explain and provide counsel with respect to such documentation.

Authorizing Resolution. It is generally necessary for an agency's governing body to adopt a resolution that: (i) authorizes incurring the debt, (ii) establishes the terms thereof, and (iii) approves the forms and authorizes the execution and delivery of the financing documents. This must generally be done before a preliminary official statement is mailed. Prior to marketing the debt, certain pricing and other terms are usually unknown. Therefore, the governing board must either approve the financing again after sale terms are known or, more commonly, delegate to appropriate officers the power to finalize the terms of the financing within specified parameters.

Indenture; Trust Agreement; Bond Resolution. The central document in a water or wastewater agency financing is the instrument under which the bonds, certificates of participation, notes or warrants are issued and pursuant to which repayment is to be made. The document is usually identified as a resolution or bond resolution, an indenture or a trust agreement, or a fiscal agent agreement. Regardless of its name, in each case its purpose is to set forth the principal terms of the agreement between the agency and the owners of the debt. For the sake of clarity, the central financing document is referred to below as an "indenture."

The indenture establishes the various terms of the bonds, including principal and interest payment dates, method and place of payment and, in the case of variable-rate debt, tender rights and the mechanics of tenders, the remarketing process and methods for determining interest rates applicable to the bonds. The indenture also provides for the application of the proceeds of the bonds, the establishment of a construction or acquisition fund and the application of moneys in such fund for the purposes of the financing. In addition, the indenture addresses revenues and accounts, including the pledge of revenues (if applicable), the application of revenues to the payment of debt service, the maintenance of a debt service reserve account and the investment of moneys held under the indenture. If the bonds are subject to optional or mandatory redemption prior to maturity, the indenture will specify the terms of such redemption. The indenture also contains covenants of the agency, including a covenant to pay the bonds when due, tax covenants and any necessary financial or operating covenants not provided for elsewhere. Finally, the indenture generally specifies events of defaults and remedies, provides for the appointment and duties of the trustee or fiscal agent, describes the purposes for and manner in which the indenture and other financing documents can be amended, describes the manner in which the bonds may be defeased and the lien of the indenture discharged and sets forth the rights of any credit enhancement provider.

Lease Agreement; Installment Sale Agreement. In lease or installment sale financings, the lease agreement or installment sale agreement is the other primary document. A lease agreement contains many provisions similar to those that would be included in a standard, non-financing lease, including provisions relating to the lease of the property, the term of the lease, the payment of lease payments, the maintenance of leased property, insurance, defaults and remedies. The installment sale agreement provides for the acquisition or construction of the property to be acquired by the agency by the seller and the sale of that property to the agency. Additionally, the lease or installment sale agreement will include provisions relating to the prepayment of lease or installment sale payments (which provisions match the prepayment provisions in the indenture) and various agency covenants. Finally, if necessary to avoid constitutional or statutory limitations on the incurrence of debt by the agency, a financing lease includes either “abatement” provisions or “annual appropriation” provisions.

Official Statement. Except in the case of certain direct loans and private placements, when an agency sells debt to investors it must prepare a disclosure document, usually called an official statement, containing information about the agency and the bonds. In compliance with applicable securities laws, the official statement sets forth information about the terms of the bonds, the security for the bonds, the sources and uses of the proceeds of the bonds, the project being financed with the proceeds of the bonds, the agency, certain material risks inherent in an investment in the bonds, the documents under which the bonds are issued and the tax-exemption of interest on the bonds. Prior to the sale of the bonds, a preliminary official statement is usually distributed to potential investors. Following the sale, a final official statement reflecting the terms of the sale is distributed to purchasers of the bonds and the Municipal Securities Rulemaking Board.

Purchase Contract; Notice of Sale. In a negotiated sale, the agreement for the purchase and sale of the bonds is formalized in a purchase contract between the underwriter or underwriters and the agency that specifies the purchase price of the bonds to be paid by the underwriter; the interest rates, maturity dates and principal amounts of each maturity of the bonds; the time, date and place of the closing of the bond issue; the allocation between the underwriter and the agency of the expenses incurred in connection with the bond issue; the agency’s representations and warranties to the underwriter; any continuing disclosure covenants required

for compliance by the underwriter with Securities Exchange Commission Rule 15c2-12 (including requiring the execution and delivery of a Continuing Disclosure Agreement or similar document); any rights the underwriter and the agency have to indemnification from each other; and the conditions to the underwriter's obligation to purchase the bonds.

In a competitive sale, the bonds are sold by means of a notice of sale inviting bids, which is published in a financial newspaper and is also generally distributed to likely bidders. The notice of sale describes the requirements of the bond issue, including the method of delivering bids and the date, time and place of the bid opening or, if an electronic bidding platform is used, the requirements for participation, the basis for determining the winning bid, the terms of the bonds and the security therefor, and any limitations on the bonds that must be incorporated into all bids. The notice of sale, together with the winning bid and the agency's acceptance of such bid, form the agreement for the purchase and sale of the bonds between the agency and the underwriter submitting the winning bid.

Legal Opinions. The central legal opinion in an agency debt financing is the approving opinion of bond counsel with respect to the validity of the debt, the validity of the pledge of security for the debt, the enforceability against the agency of the basic financing document or documents and the tax-exemption of interest on the debt. This opinion is addressed only to the agency, but is understood to be relied upon by purchaser of the debt. In a negotiated sale, bond counsel may also provide a "supplemental opinion" to the underwriter addressing certain securities law issues, including the exemption of the bonds from the registration requirements of the Securities Act of 1933, and other ancillary issues.

Agency counsel is generally responsible for providing certain opinions within the scope of its representation of the agency, including opinions that there is no litigation that would adversely affect the financing, that all approvals necessary to consummate the financing have been obtained, that all procedural requirements necessary to consummate the financing have been met and that performance by the agency will not constitute a material breach of any existing agency contract. Counsel to other transaction participants, including the trustee, the underwriter and the credit provider, if any, are also often required to opine as to the enforceability of documents against their client and/or the accuracy of any disclosure materials provided. In some transactions, opinions addressing other key legal issues are required.

Closing and Other Documents. Each agency financing also includes a number of documents that, together, are referred to as closing documents. These include evidence of the authorization of the financing participants to perform their respective obligations, certifications that the conditions precedent to issuance of the bonds have been satisfied and receipts for the bonds and the purchase price of the bonds. Another important closing document is the tax certificate, which contains the factual representations and covenants necessary for bond counsel to render its tax opinion.

If the financing is credit- or liquidity-enhanced, the financing documentation may include an insurance policy, a letter of credit or a standby bond purchase agreement or reimbursement agreement with a credit or liquidity bank. Depending upon the financing technique involved, the financing documentation may include additional documents.

Document Preparation and Approval

Once the financing team has been assembled and the goals and structure of the financing fleshed out, bond counsel prepares drafts of the bond documents and authorizing resolutions; disclosure counsel or underwriter's counsel prepares a draft of the official statement; and the financial advisor or lead underwriter prepares a preliminary financial analysis of the transaction. As applicable, underwriter's counsel prepares a draft of the bond purchase agreement or bond counsel or the financial advisor prepares a notice of sale. Documents are distributed for review and comment by members of the financing team, usually presented at document meetings or on conference calls.

When the documents are in substantially final form (generally after a second or third draft), they are submitted to the agency's governing board for approval through adoption of a resolution authorizing the debt. The governing board generally delegates to agency officers the authority to complete the issuance of the debt within given parameters. The documents and relevant financial information and projections are also generally submitted to one or more rating agencies for their review. If credit enhancement or liquidity support is necessary or desirable, proposals are generally solicited at this time. In addition, the underwriters and their counsel also perform such investigation of the agency and its affairs as they deem necessary to satisfy their "due diligence" obligation under applicable securities laws.

Ratings

Investors value ratings because of the expertise of rating agencies in evaluating credits and the extent of the investigation undertaken by rating agencies in the course of assigning ratings. A rating on a debt obligation of a water or wastewater agency represents the judgment of an independent rating agency as to the current creditworthiness of the agency with respect to the repayment of such obligation. The principal rating agencies for municipal obligations are Moody's Investors Service, Standard & Poor's Ratings Service, and Fitch Ratings. There are separate rating categories for long-term debt, short-term debt and bondholder tender options. The highest long-term rating is "Aaa" or "AAA"; "A" is considered a solid rating; and "Baa3" or "BBB-" is the lowest rating still considered "investment grade." If properly structured credit enhancement is obtained, the rating for an issue of debt can be based upon the credit rating of the credit enhancement provider.

The factors considered by rating agencies in rating water and wastewater agency debt depend in large part upon the type of the debt and the security for its payment.

Some of the issues typically examined by rating agencies (and prospective underwriters, credit enhancement providers and investors) in analyzing debt secured by enterprise revenues include:

- (i) the ability of the enterprise to acquire or produce and deliver the revenue-generating product or service (*e.g.*, water or wastewater treatment),
- (ii) the ability of the enterprise to sell the revenue-generating product or service, including the ability of its ratepayers to bear anticipated rates and fees;
- (iii) past financial performance of the agency, including historical revenues, operation and maintenance costs and debt service on outstanding bonds and other obligations;
- (iv) financial projections, including revenues and operating expenses, as well as any debt service on future borrowings (expected or permitted under the documents);
- (v) quality of management;
- (vi) economy and demographics of the agency's service area; and
- (vii) bond program structure and the quality of the legal documents relating to the financing.

The rating process is generally orchestrated by the agency's financial advisor in a competitive sale and the lead underwriter or the financial advisor in a negotiated sale. Information on the agency and the enterprise, projections or engineering reports and draft legal documents are all provided to the rating agency. The rating agency often asks questions or requests additional information from the agency and provides reactions to the general terms found in the legal documents, and may schedule a formal meeting where members of the financing team can make a presentation and/or address rating agency questions or concerns. After bonds are issued, the agency will be required to supply the rating agency periodic information to enable it to monitor the debt and determine whether any rating reduction or increase is warranted.

Sale and Closing

Following governing board approval, the receipt of ratings and/or credit or liquidity enhancement commitments, and the completion of the due diligence process, the bonds are marketed and sold. In a competitive sale, a preliminary official statement and a notice of sale are distributed and, at an announced time, bids are received and the bonds awarded. In a negotiated sale, a preliminary official statement is mailed, the bonds are "priced" (*i.e.*, orders from investors are solicited and received by the underwriters) and the bonds are sold through the execution of the bond purchase contract between the agency and the underwriters. Following sale, a final official statement reflecting the terms of the sale is prepared and distributed to investors.

The final stage in the financing process is the closing, which is generally scheduled to occur within two weeks of the sale date. At closing, the bond documents and all necessary certificates and opinions are executed and delivered and the bonds are issued, delivered and paid for. Generally, all executed documents and opinions are deposited in escrow with bond counsel on the date prior to the closing for final review and are then released simultaneously on the closing date once all conditions for issuance and delivery of the debt have been satisfied and moneys representing the purchase price of the bonds have been delivered by the underwriter to the trustee.

Private Placements and Direct Loans

Private placements and direct loans are two additional financing structures available to agencies which share some, but not all, of the characteristics of the financings described above. Both private placements and direct loan structures have been more frequently employed by agencies following the recent credit crisis.

A private placement is essentially a limited scope “public” offering in which the agency employs a “placement agent” to locate a purchaser or small set of purchasers for its bonds. Usually, such purchasers are financial institutions, including banks and certain types of mutual and other funds that can deliver certifications concerning their status as qualified institutional buyers or accredited investors, in order to permit the issuer to take advantage of certain exemptions in securities laws. Privately placed bonds are often unrated. In addition, because the terms of the bonds and related disclosure requirements can generally be negotiated directly with purchasers in a private placement, issuance and marketing costs are lower and the issuer may be able to obtain additional flexibility with respect to the financing schedule and certain financing terms, as there is no need to structure the issue to appeal to investors in general. Privately placed bonds are, however, a less liquid investment and frequently bear a higher interest rate than bonds sold through a full public offering. In addition, special securities laws and regulations may apply to such transactions, requiring specific types of compliance advice from various counsels.

A direct loan is a special type of private placement in which the agency generally issues and sells a single bond to a bank or other financial institution. Though in form such a sale is a bond issuance by the agency pursuant to its statutory authorization, in substance such a transaction may be viewed as the bank effectively making a private loan to the agency with the repayment obligation evidenced by the bond or bonds and any ancillary credit agreements.

CHAPTER FIVE

Federal Tax Law Considerations

Under the Internal Revenue Code of 1986 (the “Code”) and regulations adopted by the Internal Revenue Service pursuant to the Code (the “Regulations”), bonds issued by water and wastewater agencies, as units of state or local government, generally bear interest that is excludable from gross income for federal income tax purposes. For purposes of the Code, the term “bond” means any evidence of indebtedness, including notes or financing leases (which are treated as installment sale agreements under the Code). Although excludable from gross income for federal income tax purposes, interest on bonds may be taken into account in determining other federal income tax consequences, such as corporate or individual alternative minimum tax, interest expense deductions, taxation of social security benefits and the like.

Notwithstanding the general rule that interest on state or local bonds is excludable from gross income for federal tax purposes, interest on such bonds is taxable if the bonds are “private activity bonds” (unless the bonds fit within an enumerated exception), if the bonds are “arbitrage bonds,” if the bonds are federally guaranteed, or if the bonds violate various other prohibitions contained in the Code.

Issuers must ensure that all requirements imposed by the Code are satisfied at all times that an issue of bonds is outstanding.

Federal subsidies of debt issued to finance capital improvements can take forms other than tax-exemption. “Tax credit” bonds, such as “Clean Renewable Energy Bonds,” allow the bondholders to take credits against tax liability, and “direct subsidy bonds,” such as “Build America Bonds,” provide for payment of an amount equal to a percentage of the interest cost of the bonds directly to the issuers of such bonds. The details of such programs are beyond the scope of this book. In general, however, although such programs require satisfaction of additional or alternative

conditions, most of their requirements are similar to the requirements for tax-exempt bonds discussed in this chapter.

Capital Expenditure Financings

A capital expenditure means any cost of a type that is properly chargeable to a capital account (or would be so chargeable with a proper election) under general federal income tax principles. For example, costs incurred to acquire, construct or improve land, buildings, and equipment generally are capital expenditures. Depending on the facts and circumstances of the transaction, capital costs associated with the financing of water and wastewater facilities may be financed on a tax-exempt basis with: (i) governmental bonds, or (ii) exempt facility bonds. The focus of this chapter will be on governmental bonds issued to finance facilities and working capital. Further issues related to the acquisition of water or treatment capacity are addressed in Chapter 7, and the requirements for tax-exempt exempt-facility bonds are discussed in Chapter 9.

The most common way for governmental units to finance water and wastewater facilities is through the issuance of governmental bonds. A bond issue will be a governmental bond if: (i) ten percent or less of the proceeds of the bond issue are used directly or indirectly in trades or businesses carried on by persons other than a state and local governmental unit (the “Private Business Use Test”), or (ii) the amount of revenues derived (directly or indirectly) from such trade or business use and payments or property used in such trade or business that secure the bond issue total ten percent or less of the debt service on the bond issue (the “Private Payment or Security Test”). The Private Business Use Test threshold is reduced to five percent in the case of a private business use which is: (i) unrelated to any governmental use also being financed with the issue, or (ii) disproportionate to the related use being financed. Bonds will also be treated as private activity bonds if the lesser of five percent or \$5,000,000 of the proceeds of the issue is used to make loans to persons other than state or local governmental units. Private activity bond volume cap may be required if private use exceeds \$15,000,000 for purposes of the Private Business Use Test, all activities of the federal government (including its agencies and instrumentalities), Section 501(c)(3) tax-exempt organizations and other persons (other than state and local governmental units) who are not natural persons are treated as trade or business activities.

In determining whether a water or wastewater facility is used in a trade or business, use of the facility by members of the general public is not taken into account. For example, if an issuer through its water facility provides water to residences and private businesses and both the residences and the private businesses are charged a uniform rate for water services, purchases of water by such residences and businesses will be viewed as use by members of the general public. Conversely, if an issuer provides water to private businesses through “take or pay contracts” or similar output-type contracts or on a basis other than the basis on which the service is provided to members of the general public pursuant to contracts fixing quantity and price for periods exceeding thirty days, such use and the related payments will be aggregated in determining whether the ten percent threshold of the Private Business Use Test and the Private Payment or Security Test has been exceeded.

A similar analysis would apply in the case in which an issuer is seeking to supply water through its bond-financed facility to several water wholesalers or retailers for distribution. If any of the wholesalers or retailers (or any of the entities that purchase water from them) are not state or local governmental units, the issuer must analyze the amount of private trade or business use as well as any related payments generated by the water sales. Thus, prior to a bond financing and at all times while the bonds are outstanding, an issuer must be aware of the ultimate users of the water supplied by the bond-financed property.

Operating Agreements

Private use can also arise through contracts allowing private parties to earn fees through the operation of governmentally owned facilities. In general, private use can be avoided only if such an agreement satisfies the requirements for a “qualified management contract.” Compensation under a “qualified management contract” must be reasonable, may not be based on net revenues or profits, and must satisfy one of the following combinations of term and compensation: (see chart on page 64).

Qualified Management Contract Tests

IF THE COMPENSATION IS THIS:	THEN THE TERM MAY BE:	SUBJECT TO TERMINATION AS FOLLOWS:
<p>At least 95% of the compensation for services for each annual period during the term of the contract is based on a periodic fixed fee.</p>	<p>The term (including all renewal options) must not exceed the lesser of (i) 80% of the reasonably expected useful life of the financed property, or (ii) 15 years. A productivity award, with certain restrictions, is permissible.</p>	
<p>At least 80% of the compensation for services for each annual period during the term of the contract is based on a periodic fixed fee.</p>	<p>The term (including all renewal options) must not exceed the lesser of (i) 80% of the reasonably expected useful life of the financed property, or (ii) 10 years.</p>	
<p>Either at least 50% of the compensation for services for each annual period during the term of the contract is based on a periodic fixed fee or all of the compensation is based on a capitation fee, or a combination of a periodic fixed fee and a capitation fee.</p>	<p>The term (including all renewal options) cannot exceed 5 years.</p>	<p>The contract must be terminable by the facility on “reasonable notice,” without penalty or cause, at the end of the 3rd year.</p>
<p>All compensation for services is based on a per-unit fee or a combination of a per-unit fee and a periodic fixed fee.</p>	<p>The term (including all renewal options) must not exceed 3 years.</p>	<p>The contract must be terminable by the facility on “reasonable notice,” without penalty or cause, at the end of the 2nd year.</p>
<p>All compensation for services is based on a percentage of fees charged or a combination of a per-unit fee and a percentage of revenue or expense fee.</p>	<p>The term (including all renewal options) must not exceed 2 years.</p>	<p>The contract must be terminable by the facility on “reasonable notice,” without penalty or cause, at the end of the 1st year.</p>

Reimbursement of Prior Expenditures

An issuer may often finance costs associated with a project out of its general fund or out of restricted funds in anticipation of being reimbursed from proceeds of a future bond issue. In order for the proceeds of the bonds to be deemed expended upon repayment to the issuer (i) no later than sixty days after payment of the original expenditure, the issuer must adopt a declaration of “official intent” for the original expenditure, (ii) the reimbursement generally must be made not later than eighteen months after the later of the date the original expenditure is paid, or the date the project is placed in service or abandoned, but in no event more than three years after the original expenditure is paid, and (iii) the original expenditure generally must be a capital expenditure. If an issuer satisfies the reimbursement guidelines described below, the bond proceeds will be deemed expended for tax purposes upon requisition by the issuer. If the reimbursement guidelines are not satisfied, bond proceeds disbursed to the issuer for prior expenditures will not be deemed expended for tax purposes and will be subject to the yield restriction, rebate and other provisions of the Code.

An “official intent” is an issuer’s declaration of intent to reimburse an expenditure (made from its own funds) with the proceeds of a debt obligation. The official intent of an issuer to reimburse expenditures from bond proceeds may be made in any reasonable form, including: (i) a resolution of the issuer, (ii) action by an appropriate representative of the issuer (*e.g.*, a person authorized or designated to declare official intent on behalf of the issuer), or (iii) specific legislative authorization for the issuance of obligations for a particular project. The official intent must generally describe the project for which the original expenditure was paid and must state the maximum principal amount of obligations expected to be issued for the project. A project includes any property, project or program (*e.g.*, water facility capital improvement program, computer equipment acquisition or treatment plant construction). Further, on the date of declaration of official intent, the issuer must have a reasonable expectation that it will reimburse the original expenditure with proceeds of a bond issue. Official intent declared as a matter of course or in amounts substantially in excess of the amounts expected to be necessary for the project (*e.g.*, blanket declarations) are not reasonable. Similarly, a pattern of failure to reimburse actual original expenditures covered by an official intent is evidence of unreasonableness.

The official intent requirement and the reimbursement period requirement do not apply to costs of issuing any bond or to an amount not in excess of the lesser of \$100,000 or five percent of the proceeds of the bond issue, and do not apply to preliminary expenditures up to an amount not in excess of twenty percent of the aggregate issue price of the issue or issues that finance or are reasonably expected by the issuer to finance the project for which the preliminary expenditures were incurred. Preliminary expenditures include architectural, engineering, surveying, soil testing, reimbursement bond issuance costs, and similar costs that are incurred prior to commencement of acquisition, construction, or rehabilitation of a project, other than land acquisition, site preparation, and similar costs incurred incident to commencement of construction.

Cash Flow Borrowings

A working capital expenditure is any cost that is not a capital expenditure (*e.g.*, current operating expenses). Pursuant to the Regulations, proceeds of an issue of tax-exempt bonds may be allocated to working capital expenditures (and therefore be deemed spent for tax purposes) as of any date to the extent that the issuer's working capital expenditures exceed its "available amounts." Available amounts means any amount that is available to an issuer for working capital purposes of the type being financed by the bond issue, including cash, investments and other amounts held in accounts or otherwise by the issuer or a related party if those amounts may be used by the issuer for working capital expenditures of the type being financed by the issue without legislative or judicial action and without a legislative, judicial or contractual requirement that those amounts be reimbursed.

Generally, agencies may also issue revenue anticipation notes ("RANs") to provide a ready source of funds to finance working capital expenditures during periodic cash flow deficits. Such deficits may result from a temporary mismatch of revenues and expenses within a fiscal period. Issuers may keep any arbitrage earnings generated by the investment of the RAN proceeds provided that the issue is sized so that all of the RAN proceeds are reasonably expected to be expended on working capital expenditures within thirteen months of the issue date and the requirements described below for an arbitrage rebate exception are satisfied.

Issue Sizing and Term

The Code and the Regulations prohibit issuing more bonds, issuing bonds earlier, or allowing bonds to remain outstanding longer than is otherwise reasonably necessary to accomplish the governmental purposes of the bonds based on all the facts and circumstances. An important factor bearing on this determination is whether that action would reasonably be taken to accomplish the governmental purpose of the issue if interest on the issue were not excludable from gross income. With respect to bond issue sizing, if, as of the issue date of the bonds, the issuer does not reasonably expect to spend at least eighty-five percent of the proceeds of the bonds on the governmental projects for which the bonds were issued within three years or more than fifty percent of the proceeds is invested in taxable securities with a guaranteed yield for more than four years, the expected schedule for expenditures must be examined to determine that the bonds are not taxable “hedge bonds.” With respect to bond term, bonds that finance or refinance capital projects will not generally be treated as remaining outstanding longer than necessary if the weighted average maturity of the bonds does not exceed 120 percent of the average reasonably expected economic life of the financed capital projects, and bonds that finance cash flow will not generally be treated as remaining outstanding longer than necessary if all of the bonds mature within two years.

For governmental bonds, the costs of issuance associated with the bond financing may be financed with proceeds of the bonds, as may municipal bond insurance premiums, letter of credit fees and liquidity fees, and capitalized interest may generally be financed for a period commencing on the issue date and ending on the later of three years from such date or one year after the date on which the project is placed in service.

Bond proceeds can also be used to fund a debt service reserve fund securing the bonds if it is a “reasonably required reserve or replacement fund.” A debt service reserve fund will generally be considered to be a reasonably required reserve fund or replacement fund only if the amount of proceeds of an issue used to provide such fund is limited to the least of: (i) maximum annual principal and interest requirements on the issue, (ii) ten percent of the principal amount of the issue, or (iii) one hundred twenty-five percent of the average annual principal and interest requirements on the issue.

Arbitrage Limitations

The Code provides that any bond will fail to be tax-exempt if the issuer reasonably expects to use the proceeds of such bonds, directly or indirectly, either: (i) to acquire securities or obligations with a yield materially higher than the yield on such bonds, or (ii) to replace funds used to acquire such higher yielding securities or obligations. The yield is equal to the total interest to be paid on the bonds, according to the initial offering price to the public, plus the cost of any credit enhancement fees, including bond insurance premiums and letter of credit fees. Thus, the Code restricts the rate of return on investments made with bond proceeds to a yield that is not materially higher than the interest rate, adjusted as described above, to be paid by the issuer on such bonds. However, the Code provides exceptions to yield restriction for the portion of the bond proceeds held in a reasonably required reserve fund during the life of the bond issue and for other proceeds of the bonds deposited during a “temporary period.”

Issuers may invest the proceeds of an issue to be used to finance capital expenditures prior to their expenditure at an unrestricted yield for up to a three-year period (an “initial temporary period”) provided the issuer reasonably expects that as of the issue date of the bonds the following requirements will be satisfied: (i) at least eighty-five percent of the proceeds of the bonds will be spent on capital projects by the end of the three-year period, (ii) within six months of the issue date the issuer expects to spend or expects to incur a binding obligation to a third party to expend at least five percent of the proceeds of the issue on capital projects, and (iii) the completion of the capital projects and the allocation of the proceeds of the issue to expenditures proceed with due diligence. In the case of bonds issued to finance construction expenditures, the proceeds may be eligible for a five-year initial temporary period provided that the issuer reasonably expects to satisfy the above described expenditure, binding contract and due diligence tests and both the issuer and a licensed architect or engineer certify that a longer construction period is necessary to complete the project.

An issuer may have up to a thirteen-month temporary period for amounts deposited in a bona fide debt service fund. A bona fide debt service fund is a fund used primarily to achieve a proper matching of revenues and debt service each bond year by depositing revenues in the fund until they are needed to pay debt service on a bond issue. The fund must be depleted each year except for an amount not to

exceed the greater of: (i) the earnings on the fund for the immediately preceding bond year, or (ii) one-twelfth of the principal and interest payments on the bond issue for the immediately preceding bond year.

Investment earnings on proceeds generally qualify for a one-year temporary period beginning on the date of receipt of such amounts.

To the extent that bond proceeds of an issue remain unexpended at the end of the respective temporary periods, such unexpended proceeds may generally not be invested at a yield in excess of one-eighth of one percent above the yield of the issue. Alternatively, an issuer (in most cases) may choose to make “yield reduction payments” to the United States Treasury Department. By making yield reduction payments, an issuer may continue to invest the proceeds of the bonds above the yield on the issue after the expiration of the temporary period, and any arbitrage earnings earned on such proceeds prior to expenditure are rebated to the United States Treasury Department at the same time and in the same manner as under the general rebate requirement.

Arbitrage Rebate

Since enactment of the Tax Reform Act of 1986, most bond financings for water and wastewater facilities have been subject to the arbitrage rebate requirement. To the extent that proceeds of bonds are invested at a yield in excess of the bond yield the Code requires that such excess (generally referred to as “arbitrage earnings”) must be rebated to the federal government. Thus, even though certain exceptions to the yield restriction requirements permit bond proceeds to be invested at an unrestricted yield during certain temporary periods, the rebate requirement generally requires that any arbitrage earnings be paid to the federal government. Issuers may, however, qualify for certain exceptions from arbitrage rebate liability as described below. The amount of an agency’s arbitrage rebate liability and the availability of applicable exceptions to such liability are based on actual expenditures not the issuer’s expectations.

The rebate requirement will not apply to water and wastewater financings that meet the small issue exception, its RAN exception or one of the three expenditure exceptions. The small issuer exception is available only to governmental units that possess general taxing powers. The exception may be applied to a governmental bond issue if the amount of such issue, together with the amount of any other

governmental bonds issued or reasonably expected to be issued during the same calendar year, does not exceed \$5,000,000. The proceeds of a RAN issue will be exempt from the rebate requirement, provided that the issuer satisfies the expenditure requirement and reasonable expectations requirement described above.

Under the six-month expenditure rebate exception, a bond issue is not subject to the rebate requirement if the issuer actually spends all proceeds of the issue (including investment earnings) within six months after the date the bonds are issued. Solely for purposes of determining compliance with this six-month expenditure exception, amounts held in a reasonably required reserve fund or in a bona fide debt service fund are not treated as bond proceeds. Consequently, the six-month expenditure exception rule excepts from the rebate requirement all arbitrage earnings on amounts held in an acquisition or construction fund but applies the normal rebate requirements to amounts held in a reserve fund. The six-month expenditure exception is most likely to apply to acquisition financings (where the project is being acquired rather than constructed), to RAN financings and to reimbursement financings.

Under the eighteen-month expenditure rebate exception, a bond issue is not subject to the rebate requirement if all of the proceeds (including investment earnings) are expended within eighteen months of the issue date, provided at least (i) fifteen percent of the proceeds are expended within six months, (ii) sixty percent of the proceeds are expended within twelve months, and (iii) one hundred percent of the proceeds are expended within eighteen months of the issue date of the bonds.

Under the two-year expenditure rebate exception, a bond issue is not subject to the rebate requirement if all proceeds (including investment earnings) are expended within two years after the issue date, provided that at least (i) ten percent of the proceeds are spent within six months, (ii) forty-five percent are spent within twelve months, (iii) seventy-five percent are spent within eighteen months; and (iv) one hundred percent are spent within twenty-four months. In order to qualify for the two-year expenditure exception, at least seventy-five percent of the proceeds of the bond issue must be expected to be expended for construction costs, as opposed to acquisition or financing costs. If the seventy-five percent construction cost requirement is not expected to be met by the bond issue as a whole, the Code allows the issuer to treat the bond issue as two separate issues. If one of such issues (the “construction portion”) meets the seventy-five percent construction

cost requirement, then the construction portion is eligible for the two-year expenditure exception. The six month expenditure exception, or the normal rebate requirements, would apply to the remaining portion.

For purposes of the eighteen-month expenditure exception and the two-year expenditure exception amounts deposited in a reasonably required reserve fund are, generally, not treated as “bond proceeds” for determining compliance with the minimum expenditure threshold, and the rebate exception does not apply to amounts earned through the investment of such fund.

The Code also allows an issuer to pay a penalty in lieu of such rebate, if the issuer so elects at the time its bonds are issued. The penalty is one and one-half percent of the amount of proceeds of the bond issue that, as of the close of each six-month period described above, are not spent in accordance with the two-year expenditure schedule. The election to pay a penalty in lieu of rebate should only be contemplated by an issuer if the bond proceeds are expected to be invested substantially above the yield on the bonds; otherwise, an issuer may find itself paying a penalty even though the issuer is not realizing any significant arbitrage earnings.

Finally, in addition to bond proceeds held pending expenditure for the acquisition or construction of the project financed, the rebate requirement applies to arbitrage earnings on investments held in reasonably required reserve or replacement funds. However, earnings on bona fide debt service funds for governmental bonds are exempt from the rebate requirement if the gross earnings on such fund for a bond year are less than \$100,000 or if the bonds have a fixed interest rate and an average maturity of at least five years.

REBATE COMPLIANCE

Because of the technical requirements and complexities involved, issuers generally should engage an expert to provide rebate (and penalty) calculation services for their debt financings. Orrick, Herrington & Sutcliffe LLP’s wholly owned subsidiary BLX Group (formerly Bond Logistix LLC) offers full rebate compliance services, on a cost-effective basis, and accompanies its calculations with a legal opinion of Orrick, Herrington & Sutcliffe LLP regarding the conformance of the calculations with the requirements of the Code’s rebate regulations.

Tax Risks

As described above, for water and wastewater issuer debt to be and remain tax-exempt a number of complex issues must be addressed. If the Internal Revenue Service determines and successfully demonstrates that an issue of bonds is “taxable” the issuer would likely be subjected to a suit for damages by unhappy investors unless the issuer enters into a “settlement agreement” with the Internal Revenue Service pursuant to which the Internal Revenue Service agrees to allow the bonds to continue to be tax-exempt in exchange for a substantial payment by the issuer. If taxability results from an act or omission of the issuer it generally constitutes an event of default on the debt. In the case of subsidy bonds, such as Build America Bonds, the Internal Revenue Service may suspend subsidy payments if it believes the requirements for the subsidy payment have not been satisfied.

Even if a bond issue is not declared taxable, if an issue becomes subject to a “tax cloud,” either because of something relating directly to the issue or because similar transactions unrelated to the issue or the issuer are called into question, the issuer may experience trouble marketing future debt. If a “tax cloud” appears on variable-rate tender debt, the debt may all be tendered, and remarketing of the debt may not be possible or require very high interest rates.

Because of the potential losses involved, it is incumbent upon water and wastewater agencies issuing tax-exempt debt to assure that such debt in fact is and remains tax-exempt. Agencies can minimize tax risk through selecting highly competent and careful bond counsel and other financing professionals and by exercising prudence in deciding how to structure each transaction.

The Role of Bond Counsel

Bond counsel oversees all aspects of the transaction relating to tax-exemption, advises the issuer and other financing participants of the impact of various structural alternatives on tax-exemption and renders an opinion that interest on the debt is tax-exempt (generally stated “excluded from gross income for federal income tax purposes”). Bond counsel’s role is to provide both advice and approval. Although an issuer needs a bond counsel opinion to market debt as tax-exempt, it is perhaps even more important for the issuer to have a high degree of confidence that such opinion is well-considered and based upon genuine expertise, that appropriate steps have been taken to minimize tax risks, and that the issuer has been properly advised with respect to structural alternatives and remaining elements of risk.

CHAPTER SIX

Securities Law Requirements

Municipal bonds, notes, certificates of participation and other municipal securities, while generally exempt from the registration requirements of federal and state securities laws, are subject to securities law disclosure rules—generally referred to as “antifraud rules.” Agencies issuing municipal securities must ensure that, in connection with the issuance and sale of such securities to the public, prospective purchasers are provided the information they need to make an informed investment decision. Municipal issuers, and in certain instances their board members, officers and staff, can face suit or even civil or criminal penalties if the disclosure provided has material misstatements or omissions. In recent years, the United States Securities and Exchange Commission (the “SEC”) has indicated its increasing interest in perceived shortcomings in municipal disclosure practices through numerous public pronouncements, the creation of an enforcement group targeted specifically at municipal securities and a series of high-profile investigations and civil actions.

Furthermore, investors now, to a greater extent than ever, need and desire to make their own informed credit evaluations, which requires comprehensive and comprehensible disclosure. Thus, on the positive side, municipal issuers who tell their story in a clear and complete way and develop a reputation for good disclosure can derive a financial benefit in increased market acceptance and reduced interest rates when selling their bonds.

This chapter provides a very brief overview of municipal issuers’ securities law obligations and the content and preparation of the “Official Statement,” the document that generally serves as the disclosure document for tax-exempt bonds issued to finance water and wastewater projects. For a more detailed discussion, see the Orrick publication *Disclosure Obligations of Issuers of Municipal Securities*.

Federal Securities Law

Statements by municipal issuers to investors, or potential investors, and even statements to the public generally, if likely to be heard and relied upon by the securities market, are subject to regulation by the SEC under two key antifraud provisions of federal law: Section 17(a) of the Securities Act of 1933; and Rule 10b-5 promulgated by the SEC pursuant to Section 10(b) of the Securities Exchange Act of 1934. These laws and regulations are intended to ensure that parties buying or selling securities have access to the information necessary to make an informed investment decision. The laws require that the information provided in connection with the offer or sale of securities not contain any untrue statement of a material fact and not omit to state a material fact necessary to make such information not misleading. Various state laws also impose liability for inadequate disclosure, and securities sales are subject to general statutory and common-law rules such as those prohibiting fraud.

The agency is primarily liable for any material misstatements or omissions regarding the agency and the debt made in the documents used to offer and sell the agency's securities. The agency may not transfer this primary liability to its underwriters, financial advisor, agency counsel, bond counsel, disclosure counsel or any of the other parties involved in the financing. Such parties may have obligations of their own, but any liability of such parties will not absolve the agency of its primary liability.

Section 17(a): "It shall be unlawful for any person in the offer or sale of any securities by the use of any means . . . of . . . communication in interstate commerce or by the use of the mail, directly or indirectly

1. to employ any device, scheme or artifice to defraud, or
2. to obtain money or property by means of any untrue statement of a material fact or any omission to state a material fact necessary in order to make the statements made, in light of the circumstances under which they were made, not misleading, or
3. to engage in any transaction, practice, or course of business which operates or would operate as a fraud or deceit upon the purchaser."

Rule 10b-5: It is “unlawful for any person, directly or indirectly, by the use of any means . . . of interstate commerce, or of the mails . . .

- a. to employ any device, scheme, or artifice to defraud,
- b. to make any untrue statement of a material fact or to omit to state a material fact necessary in order to make the statements made, in the light of the circumstances under which they were made, not misleading, or
- c. to engage in any act, practice or course of business which operates or would operate as a fraud or deceit upon any person, in connection with the purchase or sale of any security.”

False, misleading or incomplete, or even negligent, disclosure practices can lead to such outcomes or consequences as:

- investigation by the SEC,
- investigation by a local district attorney or the U.S. Justice Department,
- imposition of fines or penalties,
- civil suits for damages,
- substantial out-of-pocket costs to defend against government or private investigations or suits,
- harm to an issuer’s reputation and investor confidence,
- inability to obtain timely audit reports and lack of access to public securities markets, and
- rating agency downgrades.

Liability for false, misleading, incomplete or fraudulent statements under the antifraud laws attaches to directors, governing board members, officers and staff of issuers. Individual officials or members of the staff found to have violated the law may be subjected to penalties, fines, injunctions or, in extreme cases, incarceration, and there is no official immunity from these consequences.

Underwriters of municipal securities also have disclosure obligations to investors and typically perform a “due diligence” investigation of the agency’s affairs and require the agency to provide certifications regarding the compliance with securities laws of the disclosure documents used in connection with the offering of the securities.

To prove a violation of Rule 10b-5, the SEC must prove, among other elements, that the issuer intended to commit manipulation or deception, or knew it was manipulating or deceiving, or recklessly disregarded a manipulation or deception, in connection with the purchase or sale of securities. However, mere negligence, such as a negligent failure to be fully informed about the agency’s financial condition, is sufficient to find a Section 17(a) violation.

Municipal issuers and their directors, governing board members, officers and staff may rely on the advice of professionals, including attorneys, financial advisors, engineers, feasibility consultants or accountants, in determining what information to disclose, but reliance on professionals must be reasonable, and issuers and their boards must exercise independent judgment in approving securities disclosure. Further, reliance on the advice of professionals will not help deflect all potential claims. Consequently, the agency and its staff must make every effort to ensure that the agency’s offering documents are accurate and complete.

The agency should make sure that the professionals upon whose advice it is relying have a solid grasp on the agency’s securities law obligations. The SEC, in fact, has stated that:

“Because they are ultimately responsible for the content of their disclosure, issuers [of municipal securities] should insist that any professionals retained to assist in the preparation of their disclosure documents have a professional understanding of the disclosure requirements under the federal securities laws.”

The Official Statement

The offering document in a public offering of water or wastewater agency securities is usually called an official statement. If the securities are being offered on a more limited basis, the offering document might be called an offering circular, a private placement memorandum or a limited offering memorandum. In any case, the offering document contains the agency's "official" statements; that is, the statements upon which the agency intends others to rely about itself, its financial condition, the bonds, the projects to be financed with the bonds and the sources of payment of the bonds. The primary purpose of the official statement is to provide information used to market the bonds to the initial purchasers, although, in addition, it supplies information to rating agencies and other interested parties. Properly prepared, the official statement also functions as the agency's primary defense against claims that its bonds were sold on the basis of incomplete or misleading information in violation of the antifraud provisions of federal (or state) securities laws. The desire to present the agency and its bonds in a favorable light to potential investors cannot be allowed to obscure the compelling demand that all material facts be disclosed.

The preliminary official statement, as its name implies, is distributed before the official statement and before the financing terms are final. It is used by the underwriters to solicit interest in the bonds. The official statement contains the final terms of the financing, including the principal amounts, interest rates and maturity dates of the bonds and the uses of the bond proceeds.

Guidance as to what ought to be contained in a water or wastewater agency's official statement is available from a variety of sources. The Government Finance Officers Association has produced comprehensive guidelines for disclosure in municipal offerings entitled "Disclosure Guidelines for State and Local Government Securities" (the "GFOA Guidelines"). The GFOA Guidelines are not legally binding, but they do establish a standard for disclosure that can be referred to by issuers of municipal securities. The "Disclosure Handbook for Municipal Securities" (the "Handbook"), published by the National Federation of Municipal Analysts, also contains specific disclosure recommendations for various types of debt financing techniques. The GFOA Guidelines and the Handbook are not meant to be used as a simple checklist. Rather, the agency and its financing professionals must carefully consider the agency's situation and the terms of the debt and form an independent judgment as to what information must or should be included to assure that the

official statement contains the information needed for a potential investor to make an informed investment decision and does not contain material misstatements or omissions. In either case, the threshold for adequate disclosure is the concept of materiality: information is deemed “material” if there is a substantial likelihood that knowledge of that information would be important to a reasonable investor’s investment decision. What information is material in any given case depends, of course, on the agency’s particular circumstances and the nature of the debt issue.

The official statement is the agency’s document, but in practice it is a joint product of the agency’s financing team. Coordination of the preparation of the official statement is generally undertaken by underwriters’ counsel or the agency’s disclosure counsel in a negotiated sale and by the agency’s financial advisor or the agency’s disclosure counsel in a competitive sale. This party generally prepares a draft official statement on the basis of information provided by the agency (with respect to itself, its operations and its financial condition) and bond counsel (with respect to descriptions of financing documents and tax law matters). All members of the financing team review and comment on official statement drafts, often as part of scheduled drafting sessions. Parties also conduct a “due diligence” investigation with respect to the official statement involving inquiries of agency officials and review of supporting documentation. A preliminary official statement and an official statement are generally not electronically posted or printed and distributed until all concerned parties are comfortable that the information included is accurate and complete.

Continuing Disclosure

Following issuance, water and wastewater agency securities trade in the secondary market. In recent years there has been an increased demand for information relating to municipal securities to be made available to bondholders and potential secondary market purchasers and increased SEC regulation designed to compel issuers to provide it.

The legal basis for this formal ongoing disclosure obligation is Securities and Exchange Commission Rule 15c2-12 (the “Rule”), which requires the underwriter of an issue of municipal securities to obtain a commitment (also known as an “undertaking”) by the issuer of the securities to provide this ongoing disclosure. This undertaking generally takes the form of a continuing disclosure certificate or continuing disclosure agreement executed by the issuer of the securities, or other

obligor, at closing. In keeping with the Rule, the continuing disclosure undertaking typically requires issuers or obligated persons to provide two types of ongoing disclosure—an annual report, and notices of specific events, if and when any occur.

The annual report is required to contain annual financial information and operating data for the issuer of the type contained in the final official statement, as specified in the continuing disclosure undertaking. The annual report is also required to contain the issuer's most recent financial statements. Most issuers agree to provide the annual report for a given fiscal year within six to nine months of the fiscal year close, taking care to allow sufficient time for preparation and receipt by the governing board of the audited financial statements. The agency should review carefully the section of the continuing disclosure agreement describing the contents of the annual report. The description of non-audit information to be provided should be specific and try to limit the requirement to information that the agency already updates each year and plans to continue to update.

The continuing disclosure undertaking also requires the issuer to provide notice “in a timely manner not in excess of ten business days after the occurrence of” certain types of events that are likely to be material to bondholders or potential investors. Both the annual report and any event notices are required to be filed with the Municipal Securities Rulemaking Board through its Electronic Municipal Market Access (EMMA) system. Many issuers' filings are handled by finance or other staff, while others engage the trustee, financial advisor, or other outside consultant as a dissemination agent, to remind the issuer of the required filings and assist with their preparation and submission to EMMA.

In addition to filings made in order to comply with an “undertaking,” information can be distributed to the market through response to inquiries, press releases, web postings and/or voluntary EMMA filings. For agencies borrowing frequently, current official statements can also serve as a source of information for the market. Whenever making statements that may be relied upon by the market, the agency must be sure that statements that could impact the value or marketability of its outstanding bonds, especially, but not limited to, statements concerning the agency's financial condition or prospects, do not contain material misstatements and that other information does not also need to be disclosed to avoid having what is said be misleading. On a positive note, however, agencies that have earned a reputation for providing forthright and accurate disclosure on a timely basis can benefit when the agency next accesses the market.

CHAPTER SEVEN

Acquisition of Treatment Capacity and Water Supply

Financing the acquisition of treatment capacity (either water treatment capacity or wastewater treatment capacity) and the acquisition of water supply (either water rights or water for future delivery) can present difficult financing and tax law issues. Some of the more important of these issues are reviewed in this chapter.

Water and Wastewater Treatment Capacity

The acquisition of water or wastewater treatment capacity, whether through the construction or expansion of a plant owned by the agency or the acquisition of a share in the capacity of a plant owned by another entity, is generally, for tax and accounting purposes, the acquisition of a capital asset. Tax-exempt financing for such acquisition is available whether the agency owns the plant or acquires capacity (even capacity in a plant owned by a nongovernmental entity). The extent to which the acquisition can be financed on a tax-exempt basis can, however, be impacted by the type of users of the output of the facility. The agency must therefore be cognizant of contractual or other arrangements that cause excessive private trade or business use. See “Chapter 5: Federal Tax Law Considerations—Capital Expenditure Financings.”

More challenging issues can be presented on the financing side, especially if the additional treatment capacity is necessitated by new development. The agency will generally want the cost of such additional treatment capacity to be borne in large part through connection fees and similar development charges, the receipt of which tends to be less reliable than other sources of enterprise revenues. Because, as a practical matter, capacity cannot generally be added incrementally and capacity must be in place before development can occur and development fees collected, such projects can increase significantly the pressure on regular rates and charges if development occurs more slowly than anticipated.

The acquisition of water rights (the right to a particular source of water in perpetuity) generally constitutes the acquisition of a capital asset and can be financed on a tax-exempt basis.

Acquisition of Water Supply

The acquisition of water rights (the right to a particular source of water in perpetuity) generally constitutes the acquisition of a capital asset and can be financed on a tax-exempt basis. The form the acquisition takes matters, however, and some arrangements, such as the acquisition of water rights through the acquisition of shares in a mutual water company, involve complex issues best worked through in advance with bond counsel. The purchase of water, by contrast, generally constitutes an operation and maintenance expense for tax and accounting purposes and any financing of such purchase on a tax-

exempt basis would need to satisfy the requirements for financing working capital expenditures. See “Chapter 5: Federal Tax Law Considerations—Cash Flow Borrowings.” If the purchased water is to be received in the future, moreover, the availability of tax-exempt financing must be determined with reference to the complex rules regarding prepayments.

On the financing side, payments for water, an operation and maintenance expense, are generally paid ahead of debt service on the agency’s water revenue bond debt, so long-term contracts to purchase water rank ahead of debt in payment priority. Agencies must take care, however, in the timing of the recognition of the payment and the receipt of water, as recognizing payments in one fiscal year and water received and sold in another fiscal year can distort the agency’s debt service coverage ratios.

CHAPTER EIGHT

Refunding of Outstanding Debt

Water and wastewater agencies often find it advantageous to “refund” outstanding debt through the issuance of new debt the proceeds of which are used to retire the outstanding debt. The refunding bonds are generally, but not always, secured in the same manner as the refunded bonds. Refundings are generally done to achieve debt service savings. If current interest rates are significantly lower than the rates of interest payable on the outstanding debt, savings can be achieved through replacing the outstanding debt with new, lower interest cost debt. Often only that portion of the outstanding debt on which significant savings can be achieved is refunded. In addition to savings, refundings can be used to restructure debt, paying principal on earlier or, more often, later dates, or to change from variable-rate to fixed-rate debt or from fixed-rate debt to variable-rate debt.

Refundings are also done to remove burdensome covenants made by the issuer to the holders of the outstanding debt that are no longer required by the market. Furthermore, if the issuer is incurring additional “new money” debt, refunding old debt at the same time may be advantageous in order to consolidate debt on the issuer’s balance sheet or provide for a uniform flow of funds or may be necessary if the issuer cannot satisfy the additional debt requirements of the outstanding debt. Providing for the payment in full (“defeasance”) of outstanding debt generally relieves an issuer of all covenants, additional debt and revenue allocation requirements imposed with respect to such debt.

Retirement of the outstanding debts generally occurs: (i) shortly after the date of issue of the refunding bonds, or (ii) on the first date that the outstanding obligations may be redeemed by the issuer. In a refunding transaction, the refunding bonds are issued to pay all or a portion of the interest and principal of the prior obligations, including redemption premium (if any). Bonds are advance refunding bonds if the proceeds of such bonds are expended to pay principal, interest or redemption premium (if any) on the prior obligations more than ninety

days after the issue date of the refunding bonds. Bonds are current refunding bonds if the proceeds of such bonds are expended to pay the principal or interest on the prior obligations within ninety days after the issue date of the refunding bonds.

Statutory Authority

Statutes providing for the issuance of bonds generally provide for the issuance of refunding bonds. In addition, several statutes (*e.g.*, the California Local Agency Revenue Bond Refunding Law) provide general authority to public entities, including water and wastewater agencies, to refund outstanding debt, including refunding obligations to pay installment payments under an installment sale agreement with refunding revenue bonds. The issuance of refunding bonds usually does not require voter approval, even if the issuance of the refunded bonds did. See “Chapter 3: Types of Debt Instruments—Authority to Incur Debt.”

Defeasance Mechanics

In an advance refunding transaction, the proceeds of the refunding bonds are generally used to purchase obligations (“Defeasance Securities”) of the type permitted by the terms of the outstanding debt to be used to “defease” the outstanding debt. Defeasance Securities generally are deposited in an escrow fund for the refunded bonds. The principal, interest and redemption premium (if any) on the refunded bonds will then be paid from amounts derived from the Defeasance Securities on deposit in the escrow fund until the date that the refunded bonds may be redeemed by the issuer. Although the refunded bonds are still held by the bondholders until their call date and continue to be traded on the market, the indenture or bond resolution is legally defeased with respect to the refunded bonds, and the holders of the refunded bonds look to the escrow fund rather than the issuer’s revenues or other collateral for payment.

In a current refunding transaction, proceeds of the refunding bonds are used to pay the principal of and interest on the refunded bonds shortly after the date the refunding bonds are issued. If the proceeds of the refunding bonds are not used immediately to retire the refunded bonds, the proceeds may be invested at an unrestricted yield for up to ninety days until the call date of the refunded bonds. As with an advance refunding transaction, the refunded bonds generally are legally defeased, and the holders of the refunded bonds generally look to the escrow fund for payment.

A refunding escrow is generally established pursuant to an escrow agreement between the issuer and the trustee for the refunded bonds or pursuant to a letter of instructions from the issuer to the trustee for the refunded bonds. The escrow agreement or letter of instructions provides for the deposit of money with the trustee, the purchase of the Defeasance Securities by the trustee and the application of amounts received with respect to the Defeasance Securities to the payment of the refunded bonds. The Defeasance Securities can consist of any securities permitted by the terms of the indenture, trust agreement or resolution pursuant to which the refunded bonds were issued (usually, but not always, limited to direct obligations of or obligations guaranteed by the United States Treasury). Defeasance Securities can consist of United States Treasury Notes and Bonds - State and Local Government Series (“SLGS”), a special series of United States Treasury obligations designed to be used in the refunding of tax-exempt debt, or securities purchased on the open market (an “open market escrow”). In either case the amounts to be received on the Defeasance Securities (as interest or at maturity) must be sufficient in time and amount to pay the interest on, and principal and redemption price of the refunded bonds.

With an “open market” escrow, if Defeasance Securities maturing on the precise dates on which amounts are needed to pay the refunded bonds are not available on the market, the escrow will be “inefficient.” Inefficiency can be addressed through the substitution of more efficient securities for the Defeasance Securities in the escrow or through instructions to the trustee to reinvest in other qualifying securities (if then available) between the date the original Defeasance Securities mature or pay interest and the date amounts are needed to pay the refunded bonds (*e.g.*, if the Defeasance Securities mature on May 15 and the refunded bonds are to be paid on July 1, the Trustee can be instructed to reinvest proceeds of the Defeasance Securities received on May 15 in new qualifying securities maturing on or before July 1). Alternatively, the issuer’s right to reinvest can be sold (for money up front) pursuant to an arrangement commonly known as a “forward supply contract.”

Federal Tax Law Considerations

Generally, under the Code, an issue of bonds may only be advance refunded if the issuer will realize present value debt service savings by issuing the refunding bonds or the issuer has a bona fide business reason for refunding the bonds. If there are

present value savings, the outstanding bonds generally must be redeemed on their first optional redemption date. The proceeds of an advance refunding issue may not be invested above the yield on the refunding bonds. The Code provides that only governmental bonds may be advance refunded and that such bonds may be advance refunded no more than once (unless the original bonds were issued prior to 1986 in which case they may be advance refunded no more than twice).

The Code does not require that an issuer realize present value debt service savings or have a bona fide business reason in order to currently refund an outstanding bond issue. An issuer may issue current refunding bonds to refund both governmental bonds and exempt facility bonds. There is no limit on the amount of times a governmental bond issue or an exempt facility bond issue may be currently refunded.

Evaluating Savings in an Advance Refunding Transaction

In an advance refunding transaction, the standard convention for determining the amount of present value debt service savings is as follows. The net debt service of the refunded bonds and the net debt service of the refunding bonds are compared and the aggregate debt service savings of the issuer realized by the issuance of the refunding bonds is determined (the “Gross Debt Service Savings”). The present value of the Gross Debt Service Savings is then determined as of the issue date of the refunding bonds using the yield on the refunding bonds as the discount rate (the “Present Value Savings”). The Present Value Savings are then reflected as a percentage of the refunded bonds. For example, assume that the yield on the refunding bond issue is six percent, the Gross Debt Service Savings is \$3,000,000 and that the principal amount of the refunded bonds is \$40,000,000. The \$3,000,000 is present valued back to the issue date of the refunding bonds at six percent to produce a Present Value Savings of \$1,000,000. The Present Value Savings of \$1,000,000 is then divided by the principal amount of the refunded bonds of \$40,000,000 to determine the Present Value Savings as a percentage of the refunded bonds or 2.5%. From a purely economic standpoint, only callable bonds (*i.e.*, bonds which may be redeemed prior to their scheduled maturity) produce real debt service savings in a refunding transaction.

CHAPTER NINE

Financings Involving Private Companies

The water and wastewater arena offers significant opportunities for public and private entities to work together to serve the public. Furnishing of water to the public is considered such an essential purpose that even private companies can access the tax-exempt bond market to finance privately owned and operated projects for this purpose. There are also many opportunities for public-private partnerships (also referred to as PPPs or P3 financings), in which a private company purchaser leases or enters into a concession agreement with the public entity owner of the facilities and uses some combination of tax-exempt bond proceeds, private equity contributions and privately placed taxable securities under section 4(a)(2) of the Securities Act of 1933 to pay for it and for any improvements.

Design/Build Projects

Design/build contracts are a departure from the traditional public works project designed by the public entity and constructed pursuant to construction contracts awarded through public bidding. Instead a single firm or team is selected on a competitive basis to both design and construct a project which meets the functional needs of the agency. The design/build approach is particularly useful for the construction of large, technologically complex projects such as water and wastewater treatment plants. Design/build contracts, which need to specify in detail the private participant's deliverables, payment terms and the allocation of risks between the parties, are complex, and agencies are generally assisted by expert outside counsel in drafting and negotiations. Proceeds of tax-exempt bonds issued by the agency may be applied to expenditures pursuant to design/build contracts with no greater restrictions than with payment of construction costs under the traditional approach.

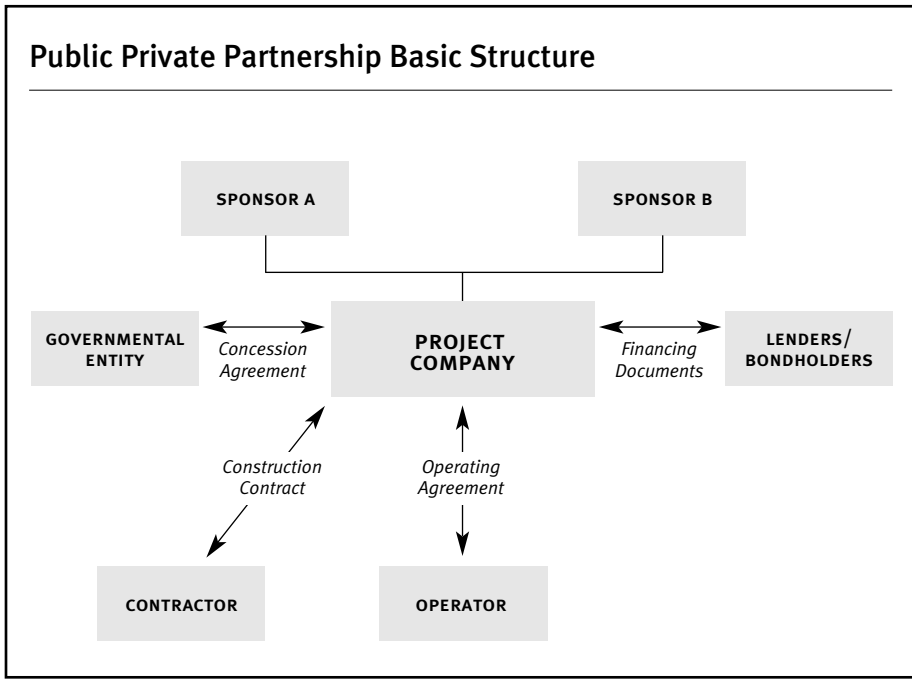
Concession or Operating Agreements

Agencies can often benefit from contracting with a private company for the operation of particular facilities, such as a treatment plant. If the facilities are to be financed or were financed with governmental tax-exempt bonds, the operating contract will likely need to satisfy the requirements for a “qualified management contract.” See “Chapter 5: Federal Tax Law Considerations—Operating Agreements.”

A local government can also provide, through a lease or concession agreement, for private operation of all or a significant portion of its system. Except in the relatively unusual instances of outright sale, ownership of the facilities does not transfer to the private company. However, the term of these lease or concession arrangements, often 30 to 40 years, means that they generally do not qualify for “qualified management contract” treatment like the operator contracts described in the preceding paragraph. The principal benefits to the local government are:

- The local government generally receives a substantial up-front payment, enabling it to monetize the value of these assets, which it can then use for other purposes;
- The concessionaire takes over responsibility for the maintenance, operation and improvement of the facilities, relieving the local government from these duties and costs; and
- The local government’s outstanding debt with respect to the facilities is usually paid off as part of the process, further relieving the financial burden on the local government.
- Debt issued to finance such a “privatization” is generally sold to institutional investors through a private placement. A secure source of revenues for the term of the obligation and a long-term contract with a qualified operator are key to a successful financing.

An example of a typical transaction structure is set forth below:



The sponsor group is usually comprised of investors and an affiliate of one or more of the construction contractors or operators. The amount of equity required to be contributed depends on the project and may also depend of the type of financing and market conditions. The concessionaire will typically be a special purpose LLC or LP and have few, if any, employees. All obligations of the concessionaire will be passed through to the contractor and operator, each of which must possess the required level of capacity and experience.

Tax-Exempt Bonds for Private Water Companies

Private water companies can finance capital improvements through the issuance of tax-exempt bonds issued by a governmental entity and loaned to the private water company if the bonds finance facilities that satisfy the requirements for “facilities for the furnishing of water” under Section 142(e) of the Internal Revenue Code of 1986, as amended (an “Exempt Water Facility”), as well

Private water companies can finance “facilities for the furnishing of water” through the issuance of tax-exempt bonds.

as the other requirements of the Code. In an exempt facility bond financing, at least ninety-five percent of the proceeds of the issue must be spent on capital costs of the qualifying water facilities. The facilities that may be financed are those components of a water system (and other functionally related and subordinate components) that are necessary for the collection, treatment, and distribution of water to a service area. A system or component may not be financed if it is a facility that merely uses water in a production process (e.g., a cooling pond or equipment that uses water internally within a manufacturing plant). Components of a dam or reservoir used to generate electric energy, such as generators and turbines, also do not qualify as an Exempt Water Facility. However, a reservoir or dam does not necessarily fail to qualify as an Exempt Water Facility solely because one use of the water is to produce electricity if at least ninety-five percent of the water is available for other purposes, such as irrigation and domestic consumption, in addition to producing electricity.

In order to qualify as an Exempt Water Facility (i) the facility must make water available to members of the general public, and (ii) either the facility must be operated by a state or local governmental unit or the rates for the furnishing or sale of the water must have been established or approved by a state or political subdivision thereof, by an issuer or instrumentality of the United States, or by a public service or public utility commission or other similar body of any state or political subdivision thereof. A state or local governmental unit is considered to operate a facility only if it has responsibility and control over the repairs and maintenance of the facility. For example, if a private trade or business leases the facility on a long-term basis and it either controls the maintenance and repair of the facility, or bears these costs, the facility will not be deemed to be operated by a state or local governmental unit.

For Exempt Water Facilities, the general public includes electric utility, industrial, agricultural, and commercial users. In order to make its water available to the members of the general public, a facility must make available at least twenty-five percent of its capacity (which must be a considerable quantity in absolute terms) to residential users within its service area, municipal water districts within its service area or any combination thereof. Except with respect to residential users and municipal water districts, an Exempt Water Facility is not required to make water available to all segments of the general public.

Bonds issued to finance exempt water facilities constitute “exempt facility bonds” under the Code and, in general, the Code imposes more burdensome requirements on exempt facility bonds than on governmental bonds.

ADDITIONAL REQUIREMENTS IMPOSED ON EXEMPT WATER FACILITY BONDS

1. **Capitalized Interest Limited.** Only the portion of capitalized interest attributable to the period prior to completion of the project will be treated as a qualifying cost for purposes of the ninety-five percent requirement described above.
2. **Costs of Issuance Limited.** The costs of issuance associated with the bond financing paid with proceeds of an exempt facility bond may not exceed two percent of the proceeds of the issue.
3. **Volume Cap Required.** An issuer of exempt facility bonds must receive a private activity bond volume cap allocation from the state in an amount equal to the issue price of the bonds.
4. **Public Approval Required.** An issuer of an exempt facility bond must obtain public approval (*i.e.*, notice, hearing and approval by an elected official) prior to the issuance of the bonds.
5. **Acquisition of Existing Property Prohibited.** Proceeds of an exempt facility bond may not be used to finance the acquisition of existing property (unless such property is substantially rehabilitated subsequent to acquisition).
6. **Land Acquisition Limited.** Less than twenty-five percent of the proceeds of the exempt facility bond may be used for the acquisition of land.
7. **Maturity Limited.** The average maturity of an exempt facility bond issue may not exceed one hundred twenty percent of the average reasonable expected economic life of the facilities being financed with the proceeds of the issue.

Project Financing; Desalination Projects

With a project financing, unlike the enterprise revenue borrowings described in Chapter 2, debt is payable solely from the revenues of the facility or facilities financed and the cash or other assets pledged as security. Private guarantees and/or private equity are sometimes required, and active private party participation is the norm. For project revenue bonds to be sold, two distinct types of risk must be addressed: construction period risk and permanent loan risk. Construction period risk, the risk that the project is not completed on time and on budget or does not perform as expected (in terms of quantity or quality of output), can be addressed through a guaranteed maximum price construction contract, performance bonds and hazard insurance. Permanent loan risk is generally addressed through a contract with the output purchaser or facility user obligating the purchaser or user to pay for output or services in an amount and at a rate sufficient to pay both operating costs and debt service. The security value of contractual obligations depends, of course, on the credit quality of the obligor and, if the output purchaser or system user is a governmental water or wastewater enterprise, the credit issues related to enterprise revenue borrowing described in Chapter 2 become relevant.

Desalination projects are an example of complex undertakings generally financed on a project finance basis. The construction and operation of such projects can be technologically challenging, and responsibility for construction, and often operation, is generally undertaken by a private company specializing in the area. The purchaser of the desalinated water produced by the facility, though, is often a governmental agency. The debt issued to finance the facility must either meet the requirements for tax-exempt, exempt-facility bonds described above or be taxable.

Governmentally owned components of the project, such as facilities for the transmission of the water to the agency's system, can, by contrast, be financed through an enterprise revenue borrowing and, of course, the enterprise credit of the agency purchasing the water is an essential element of the security for the bonds, helped because such obligation will generally constitute an obligation of the agency payable as operations and maintenance expense ahead of the agency's revenue secured debt.

Contacts

AUTHORS	TELEPHONE	E-MAIL
Stephen A. Spitz	415-773-5721.....	sspitz@orrick.com
Devin Brennan	415-773-4261.....	dbrennan@orrick.com

SAN FRANCISCO

Roger L. Davis	415-773-5758.....	rogerdavis@orrick.com
William M. Doyle	415-773-5460.....	bdoyle@orrick.com
John Y. Wang	415-773-5993.....	jwang@orrick.com

LOS ANGELES

Eugene J. Carron	213-612-2425.....	ecarron@orrick.com
Greg Harrington	213-612-2280.....	gharrington@orrick.com
Kevin Hale	213-612-2356.....	khale@orrick.com

SACRAMENTO

John R. Myers	916-329-7903.....	jmyers@orrick.com
Jenna Magan	916-329-7980.....	vcmagan@orrick.com
Bryan D. Victor	916-329-7979.....	bvictor@orrick.com

NEW YORK

Albert Simons	212-506-5040.....	asimons@orrick.com
Damon C. Pace	212-506-5272.....	dcpace@orrick.com

WASHINGTON D.C.

Darrin L. Glymph	202-339-8401.....	dglymph@orrick.com
------------------	-------------------	--------------------

PACIFIC NORTHWEST

Douglas E. Goe	503-943-4810.....	dgoe@orrick.com
Susan L. Barry	206-839-4345.....	susanbarry@orrick.com

ORRICK, HERRINGTON & SUTCLIFFE LLP publicfinance@orrick.com



UNITED STATES LOS ANGELES NEW YORK ORANGE COUNTY PORTLAND SACRAMENTO SAN FRANCISCO
SEATTLE SILICON VALLEY WASHINGTON DC GLOBAL OPERATIONS CENTER (WHEELING)

EUROPE BERLIN BRUSSELS DÜSSELDORF FRANKFURT LONDON MILAN MOSCOW MUNICH PARIS ROME

ASIA BEIJING HONG KONG SHANGHAI TAIPEI TOKYO