

Utility impact fees: Practices and challenges

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Impact fees and other growth-related fees have become an important part of the comprehensive financing plans of many utilities. This article explores required and recommended impact fee practices in terms of current laws and accepted standards in the areas of water, wastewater, and reclaimed water impact fee design, accounting, implementation, and use, including techniques for improving the accuracy of impact fee calculations. Strategies are presented that demonstrate the

reasonableness of these fees, as is a recommendation that all utilities establish a formal procedure for applicants to submit alternative impact fee calculations. Utility managers should consider the topics discussed in this article to develop—and to have regulators approve—a comprehensive impact fee policy that shows a commitment and intent by a utility to fully comply with all impact fee laws, rules, regulations, and accepted practices.

KEYWORDS: *capacity charges, growth, impact fees, legal, policy, rates*

Impact fees became prominent in Florida during the late 1970s because of the need to fund infrastructure as a result of rapid population growth and new development without burdening existing residents. Since that time, impact fees have become a widely accepted method of funding growth-related capital infrastructure in the United States, and state statutes and local government ordinances have been created to authorize and govern the use of such fees. Elected officials recognize that the usual alternative to imposing or raising impact fees (and other growth-related fees) paid for by new growth is to fund growth-related infrastructure through increased property taxes and user rates paid by the electorate. “Growth should pay for growth” is a common public policy.

However, despite their acceptance by the public, impact fees have also generated controversy and disputes, and their history is filled with lawsuits from which an extensive body of case law has been developed. Because impact fees are perceived to add to the cost of new development, developers, homebuilder associations, and other representatives of the development and construction community often review the components of such fees to ensure that the fees are legal and equitable.

Impact fee laws, regulations, and administrative codes vary among states, but common requirements are that impact fees should: be based on the need for new or enhanced capital facilities to serve new growth, approximate the value of the benefit received by a given unit of new growth, be calculated by an established formula that fairly determines the amount of the fee, and only be used for funding the capital facilities that benefit those who pay the fees. These nexus requirements have been reinforced by the US Supreme Court through landmark decisions on private property rights, especially in the cases of *Nollan v. California Coastal Commission* in 1987 (Nollan, 1987) and *Dolan v. City of Tigard* in 1994 (Dolan, 1994). The precedence established by the rulings in these two cases has helped establish the standard for “rational nexus” incorporated in many state statutes and case law.

This article explores required and recommended impact fee practices in terms of the most up-to-date laws and accepted standards in the areas of water, wastewater, and reclaimed water impact fee design, accounting, implementation, and use, including techniques for improving the accuracy of impact fee calculations. Strategies are presented for demonstrating the reasonableness of the fees as well as a recommendation that all utilities establish a formal procedure for applicants to submit alternative impact fee calculations if the applicants can demonstrate that their impact to the utility system would be less than what is calculated under the utility’s adopted impact fee methodology. Utility managers should consider the topics discussed in this article to develop—and have regulators (i.e., elected or appointed officials, board and utility committee members, and rate regulators) approve—a comprehensive impact fee policy that shows a commitment and intent by the utility to be in full compliance with all impact fee laws, rules, regulations, and accepted practices. Some states have adopted statutes or laws pertaining to the practices covered in this article, whereas other states may enact legislative requirements in the future. Examples of state and local government impact fee legislation that is cited in this article are shown in Table 1.

REQUIRED AND RECOMMENDED WATER, WASTEWATER, AND RECLAIMED WATER IMPACT FEE DESIGN PRACTICES

Water, wastewater, and reclaimed water impact fees are also called system development fees or charges, capacity or capacity reservation fees or charges, capital recovery or expansion fees, facility fees, mitigation fees, or connection fees or charges. The fees are most commonly charged on a per equivalent residential connection (ERC) basis. An ERC—sometimes known as an equivalent residential unit, residential equivalent unit, equivalent dwelling unit, equivalent living unit, or capacity unit—is representative of the average water, wastewater, or reclaimed water capacity required to serve a typical individually metered single-family residential customer. This class of users is usually the largest group of custom-

ers served by a public utility and typically has the lowest level of usage requirements for a specifically metered account.

The three general approaches used for determining a water impact fee per ERC are: (1) a system buy-in or excess capacity approach that considers the costs of existing facilities with the capacity to serve new growth; (2) an approach based on the estimated cost of system capital improvements, usually during a five- to 20-year period as recognized in state statutes (e.g., the marginal or incremental expansion approach, capacity expansion or planned facilities approach); and (3) a combined or hybrid approach that recognizes the costs of both existing and planned future facilities. Each approach has distinct advantages and disadvantages as well as data and documentation requirements. In addition to the costs of existing facilities and capital improvements, utilities are typically allowed to recoup some of the administrative costs of managing impact fee programs within their calculated impact fees. There also may be different impact fees developed for different parts of a utility's service area where appropriate.

Impact fee design is not an exact science and involves many considerations and assumptions. Costs represented in the fee calculations are often based on estimates and less-than-perfect historical asset records. The key is to design fees that are reasonable and defensible in a court of law. If the impact fee calculations are challenged, the utility may have the burden of proving by a preponderance of the evidence that the imposition or amount of the fees meets all legal requirements (Florida Statute, 2010).

An important assumption in calculating a water, wastewater, or reclaimed water impact fee per ERC is the level-of-service (LOS) standard per ERC. For water, wastewater, and reclaimed water service, the LOS standard commonly used in the utility industry is the amount of capacity (service) allocable to an ERC expressed as the amount of usage (e.g., gallons, cubic feet) on an average daily basis. This allocation of capacity represents the amount of capacity allowable to an ERC for system engineering and planning purposes, whether or not such capacity is actually used by the customer.

TABLE 1 Sample state government impact fee legislation

Government	Impact Fee Legislation	Link
Arizona	Arizona Revised Statutes, Title 9, Chapter 4, Article 6.2, §463.05 Development Fees	www.azleg.gov/FormatDocument.asp?inDoc=/ars/9/00463-05.htm&Title=9&DocType=ARS
California	California Government Code, Title 7, Division 1, Chapter 5: Fees for Development Projects (§66000–66008)	www.leginfo.ca.gov/cgi-bin/displaycode?section=gov&group=65001-66000&file=66000-66008
Colorado	Colorado Revised Statutes, Title 29, Article 1, Part 8, Land Development Charges	www.michie.com/colorado/lpext.dll?f=templates&fn=main-h.htm&cp=
Florida	Florida Statute 163.31801 (Florida Impact Fee Act)	www.leg.state.fl.us
Georgia	Official Code of Georgia, Title 36, Chapter 71, Development Impact Fees	http://law.justia.com/codes/georgia/2010/title-36/provisions/chapter-71/
Hawaii	Hawaii Revised Statute 46-143 to 46-148	www.capitol.hawaii.gov/hrscurrent/Vol02_Ch0046-0115/HRS0046/
Idaho	Idaho Statutes, Title 67, Chapter 82, Development Impact Fees	http://legislature.idaho.gov/idstat/Title67/T67CH82.htm
Indiana	Indiana Code, Title 36, Article 7, Chapter 4, §1300–1342	www.in.gov/legislative/ic/code/title36/ar7/ch4.html
Maine	Maine Revised Statutes, Title 30A, §4354, Impact Fees	www.mainelegislature.org/legis/statutes/30-a/title30-asec4354.html
Montana	Montana Code Annotated 2009, Title 7, Chapter 6, Part 16, Impact Fees to Fund Capital Improvements	http://data.opi.mt.gov/bills/mca_toc/index.htm
Nevada	Nevada Revised Statutes, Chapter 278B, Impact Fees for New Development	www.leg.state.nv.us/NRS/NRS-278B.html
New Hampshire	New Hampshire Statutes, Title LXIV, Chapter 674, §674:21, Local Land Use Planning and Regulatory Powers	www.gencourt.state.nh.us/rsa/html/LXIV/674/674-21.htm
New Mexico	New Mexico Statutes, Chapter 5, Article 8, Development Fees Act	www.conwaygreene.com/nmsu/lpext.dll?f=templates&fn=main-h.htm&2.0
Oregon	Oregon Revised Statutes, Chapter 223	www.leg.state.or.us/ors/223.html
Rhode Island	Rhode Island Public Laws Chapter 45-22.4 Rhode Island Development Impact Fee Act	www.rilin.state.ri.us/publiclaws00/law00508.htm
South Carolina	South Carolina Code of Laws, Title 6, Chapter 1, Article 9, Development Impact Fees	www.scstatehouse.gov/code/t06c001.htm
Texas	Texas Local Government Code, Title 12, Subtitle C, Chapter 395, Financing Capital Improvements Required By New Development in Municipalities, Counties, and Certain Other Local Governments	www.statutes.legis.state.tx.us/Docs/LG/htm/LG.395.htm
Utah	Utah Code, Title 11, Chapter 36a Impact Fees Act	http://le.utah.gov/UtahCode/section.jsp?code=11-36a
West Virginia	West Virginia Code, Chapter 7, Article 20: Fees and Expenditures for County Development	www.legis.state.wv.us/WVCODE/Code.cfm?chap=07&art=20#20
Wisconsin	Wisconsin Statute 66.0617 Impact Fees	http://nxt.legis.state.wi.us/nxt/gateway.dll?f=templates&fn=default.htm&d=stats&jd=66.0617

The basic impact fee calculation involves identifying the total costs of infrastructure or capacity available to new growth and dividing the total costs by the number of ERCs that could theoretically be served by such infrastructure to derive the impact fee per ERC. (Sometimes growth demand estimates are used in the denominator instead of system capacity; however, this approach is not recommended because impact fees are intended to reflect the capital cost of capacity to serve new users. Using system demand may significantly overstate this cost if the system has a considerable amount of reserve capacity.) As a simple example for determining the number of ERCs that could be served, consider a utility that has an LOS standard of 250 gpd per water ERC. After reviewing the costs of facilities in service, use of current facilities by existing users, and the utility’s multiyear capital program, if it is determined that 5.0 mgd of existing and near-term future capacity is available to serve new growth, then the number of ERCs that could be served by the capacity is 20,000 [(5.0 mgd × 1,000,000 gallons per mgd)/250 gpd].

Usually, impact fee calculations reflect the maximum justifiable amount that could be charged to an ERC of new growth given the assumptions used. Options available to the utility other than implementing the justified fee level include recommending a lower fee than what can be justified; if the impact fee represents an increase over existing levels, gradually phasing in the fee over multiple years to the calculated level; or providing the option to pay the impact fee in installments over time. (Indiana mandates that an installment payment plan must be included in impact fee ordinances for impact fees > \$5,000.) During recessionary times, regulators may be inclined to lower or eliminate impact fees in the belief that this provides an incentive for new development

and for creating jobs. By increasing capacity utilization, growth can also provide operational efficiencies to utilities through increased economies of scale. The benefits of growth should be recognized when developing the rates and fees to be charged to growth. If growth is desired, utilities may have to balance a “growth should pay for growth” policy with incentives that encourage growth. There is no evidence that lowering impact fees will result in an increase in a community’s rate of growth; developers tend to consider many issues when choosing where to invest in new development, not just lower impact fees. Many high-growth communities have high impact fees.

Regardless of the specific methodology or approach, utility management should consider the following required and recommended practices when developing water and wastewater impact fees and other types of growth-related fees. Growth-related fees other than impact fees that a utility might consider are shown in Table 2. The term “required” as used in this article means that the practice is mandatory per the statutes of one or more states when this article was published. State and case law on impact fees continues to evolve, and utilities should be aware of the latest legal requirements in their local jurisdictions.

Ensure that the individuals preparing the impact fee calculations are qualified in the utility industry. (Sample states with statutory requirements for this practice include Arizona, Hawaii, New Mexico, and Texas.) Those preparing the impact fee calculations should be considered qualified professionals in the utility industry and should be able to serve as expert witnesses during any impact fee challenges or litigation. As discussed later in this article, local ordinances governing the procedures for submitting an alternative impact fee calculation typically require that the alternative calculation be prepared and certified as accurate by

TABLE 2 Utility growth-related fees other than impact fees

Fee Type	Purpose	When Charged/Paid	Comments
Guaranteed revenue charge	Recovers fixed operating costs that the utility incurs to remain in a ready-to-serve condition before new growth connects to the system	Typically billed monthly to customers who have paid impact fees but have not yet connected to the system; after customer has connected, billing stops	Sometimes equal to the monthly base charges for water and wastewater service; can also be individually calculated to isolate fixed operating costs that should be recovered
Capital financing recovery fees, deferred revenue charges, accrued guaranteed revenue fees, and allowance for funds prudently invested fees	Reimburses existing customers for having to finance expansion-related projects in advance of growth; recovers carrying costs of capacity because capacity must be developed in advance of growth and is generally financed by use of long-term financing; used to pay debt service	Accrues monthly over time (time value of money); typically paid at same time as impact fee	Becoming popular in utility industry; before implementing such a fee and to avoid double-counting costs, utility should make sure that no interest costs are included in the impact fee calculation; often treated as another operating revenue of the utility system and can be included as a component of system gross revenues, improving utility’s net revenues debt service coverage (impact fee collections are usually not included in the calculation of net revenues [gross revenues less operating expenses])
Special charges/assessments	Costs for growth-related infrastructure for a certain portion of utility service area are charged to customers who directly benefit from the infrastructure	May be billed monthly or on tax roll	Not exclusively growth-related; could also be used to fund renewals and replacements that benefit a specific portion of the customer base; the costs of any infrastructure funded through special charges or assessments should not be included in the impact fee calculations

an expert. The credibility of the preparers can be an important factor in securing fee acceptance by the development community and in successfully defending the fees.

Impact fees should be based on the most recent and localized data. (Sample state with statutory requirements for this practice: Florida.) Any capital costs represented in the impact fee calculations should be based on local costs. This requirement may also extend to population estimates and the LOS standards assumed for impact fee design purposes. (Local population estimates are often presented in sets of three—low, medium, and high—and the utility may have discretion on which estimates to use.) Development communities tend to scrutinize these factors; therefore, the utility should be careful in determining such assumptions.

Review and revise LOS standards as appropriate during each impact fee review. (Recommended practice.) LOS standards can easily be challenged, and it is very important for a utility to be able to provide justification for any LOS standards utilized in the impact fee calculations. A review of historical flows and peak-to-average-daily-flow water production/wastewater flow relationships and trends can indicate whether an existing LOS standard is still appropriate or whether it should be updated. In an era of rising water costs and monthly water rates designed to strongly encourage water conservation, the water usage per customer may have decreased with some degree of permanence such that a lower LOS standard should be considered.

Sources that recognize or establish general LOS standards for water, wastewater, and reclaimed water facilities include: (1) the local government's code of ordinances; (2) the growth management plan (e.g., water and sanitary sewer elements); (3) the utility's master plans and engineering design criteria used to establish the need for additional capacity; (4) state regulatory agencies for private utilities; (5) state departments of health; and (6) state departments of environmental protection. (The standards for state departments may be contained in the state administrative codes.) It may also be appropriate to survey the LOS standards used by neighboring utilities, especially those with similar service area characteristics.

Maintain detailed asset records to improve the accuracy of impact fee calculations. (Recommended practice.) Impact fee calculations typically consider the costs of a utility's backbone or primary supply, treatment, and transmission facilities in service that have capacity available to serve new growth. If a utility has substantial unused capacity and no planned capacity expansions in the intermediate term, the impact fee calculations may be based exclusively on the costs of the existing facilities.

To facilitate the accurate identification of these costs, the utility's asset records should include the asset number, asset location, acquisition date, purchase price, accumulated depreciation, and whether the asset was purchased, funded through grants, or contributed. The costs of grant-funded and contributed assets are ineligible to be recovered through impact fees because such costs were not incurred by the utility—and impact fees should not provide a "windfall" to existing users. The total costs for all the assets should closely match what is reported in the utility's annual financial report for the appropriate period. The assets (including

land) should also be classified into functional categories, as shown in Table 3.

The costs of the source of supply, treatment, transmission/storage, and disposal assets may represent existing system costs that can be partially allocated to new growth in the impact fee calculations. If the utility has paid for a capacity allocation with a regional service provider (e.g., wholesale water or wastewater service), the capital costs of the assets behind this allocation may also be eligible for inclusion in the utility's impact fee calculations. The costs of onsite facilities that serve a specific development or customer—such as water/reclaimed water distribution and wastewater collection lines, meters and services, and fire hydrants—are typically not included in impact fee calculations. These costs are not included because the facilities are often donated/contributed by a developer as part of the utility's extension program, recovered from the individual properties through an assessment program based on those properties that receive special benefit from such facilities or from the application of a main line extension fee to recover the specific costs of such facilities, or funded by the customer or developer directly (e.g., by an installation charge to recover the cost of a new service line and/or the potable water meter). General plant items such as vehicles and equipment are typically funded through user rates; therefore, their costs are not usually included in the impact fee calculations. However, rolling stock can sometimes be added to a fee program if justified (e.g., fleet expansions versus fleet replacement), and some fee programs do include vehicles and equipment. Some states specify that any capital costs included in impact fees must have a minimum useful life (e.g., five years is recognized in the South Carolina Code of Laws; 10 years is recognized by Idaho, Montana, New Mexico, and Rhode Island).

Sometimes in the system buy-in approach, replacement costs (i.e., costs to replace assets at current prices) are used as a proxy for the cost of new capacity in impact fee calculations instead of original costs. If replacement costs are used, it is important to ensure that the resulting fees would not create a windfall to existing users that would violate case law.

Maintain an up-to-date inventory of the amount of linear feet of water transmission and distribution mains by line size (diameter), wastewater transmission and collection system force mains and gravity sewers by line size, and reclaimed water mains by line size. (Recommended practice.) This information can assist in classifying transmission versus distribution/collection mains (i.e., inventory data can be used to develop a reasonable allocation assumption). Some utilities have incorporated classification standards into their code of ordinances. For example, an ordinance might specify that transmission lines are defined as

those lines and appurtenant facilities used to either transmit wastewater from the collection system to the wastewater treatment plant, transmit treated wastewater to a final effluent disposal site, or transmit water from the water treatment plant to the distribution system. Transmission lines are generally any main greater than sixteen inches (16") in size for water or reclaimed water and any main greater than twelve inches (12") in size for wastewater (City of North Port, 2011).

TABLE 3 Classification of utility fixed assets by system

Asset Classification	Water System Assets	Wastewater System Assets	Reclaimed Water System Assets
Asset costs typically included in impact fee calculations	<p>Water source of supply: water intake/ withdrawal structures, wells, and raw water transmission piping</p> <p>Potable water treatment: treatment buildings and plant infrastructure</p> <p>Potable water transmission: water mains serving as backbone piping—with associated remote storage and high-service pumping equipment—that provides potable water at appropriate quantities and pressure to localized potable water distribution facilities</p>	<p>Wastewater disposal: disinfection, filtration, storage tanks or ponds, deep injection wells, effluent disposal infrastructure, piping, pumping, and outfall facilities</p> <p>Wastewater treatment: treatment and sludge management buildings and infrastructure</p> <p>Wastewater transmission: interceptor (trunk) gravity lines, master lift or pumping stations, and force mains serving as primary piping transporting wastewater from localized wastewater collection facilities to wastewater treatment facilities</p>	<p>Reclaimed water transmission: reclaimed water mains and remote storage ponds or facilities to deliver reclaimed water to localized reclaimed water distribution facilities</p>
Assets not typically included in impact fee calculations	<p>Water distribution: localized piping and equipment that connects potable water transmission facilities with customer's point of physical connection to water system</p> <p>General plant (e.g., vehicles, equipment)</p> <p>Meters and services</p> <p>Fire hydrants</p>	<p>Wastewater collection: localized piping and equipment (e.g., local lift stations, access holes, laterals) that connects customer's point of physical connection to wastewater system with wastewater transmission facilities</p> <p>General plant (e.g., vehicles, equipment)</p> <p>Meters and services</p>	<p>Reclaimed water distribution: facilities that connect reclaimed transmission facilities to customer's point of physical connection to reclaimed water system</p> <p>General plant (e.g., vehicles, equipment)</p> <p>Meters and services</p>

Another example is “General benefit water facilities are defined as water treatment facilities, water pumping stations, storage reservoirs, and water transmission and supply lines more than twelve inches (12”) in diameter” (City of Helena, 2011).

Provide a detailed capital improvement plan (costs based on local prices) and justify every capital project included in the impact fee calculations. (Recommended practice.) For every project not assigned 100% to new growth (e.g., shared system cost with existing users), be able to explain the allocation methodology for assigning a portion to new growth. Exercise caution when estimating the number of new-growth ERCs to be served by each project because different types of assets behind the capital project costs may require different approaches to estimate the cost per ERC. For impact fees based on a multiyear projected capital improvement program, utility management should first ensure that the capital program—from which the impact fee calculations are derived—is necessary, reasonable, attainable, and fundable. The utility should clearly indicate which projects are growth-related and will create additional capacity and which are renewals, replacements, and upgrades that will primarily benefit existing customers. Some utilities have four capital project funds represented in their capital program: a water growth-related capital fund; a water renewal, replacement, and upgrades fund; a wastewater growth-related capital fund (with the growth-related reclaimed water projects clearly identified and segregated); and a wastewater renewal, replacement, and upgrades fund (with the reclaimed water renewals, replacements, and upgrades clearly identified and segregated). Such detail may facilitate the impact fee review process by the development community and other interested parties.

The projects should also be classified into functional categories in a similar fashion as described previously for the existing facilities. Once the projects are classified, standards for including the capital project costs in the impact fee calculations could be as follows:

- For the water system, the project is related to the utility’s water supply, water treatment, or primary transmission/storage.
- For the wastewater system, the project is related to the utility’s primary wastewater transmission, wastewater treatment, or wastewater disposal facilities.
- For the reclaimed water system, the project is related to the utility’s primary reclaimed water transmission/storage facilities.
- The project is identified as being growth-related or providing a systemwide benefit, the cost of which should be shared by new growth connecting to the system and existing customers.
- The project will result in fixed assets being added to the system and will not be recognized as an operating expense. (New or revised accounting standards sometimes mandate the reclassification of certain capital expenditures represented in the capital program as operating expenses.)
- The project is not anticipated to be funded through grants or other contributed capital. All of these standards would need to be met for a project cost to be included in the impact fee calculations.

A utility should be prepared to defend the inclusion of every project in the impact fee calculations (e.g., explain the purpose and the benefit to new growth). If a project is ambiguous in scope (e.g., a placeholder) or does not provide a clear benefit to new growth, it should not be included in the calculations.

As previously mentioned, appropriate impact fee calculations represent the capital infrastructure costs allocable to new

growth divided by the number of new growth ERCs that such infrastructure could serve. Different types of facilities may require different approaches to estimating the number of new-growth ERCs that may be served by such assets. Whereas the estimated ERCs for a treatment plant expansion can link directly to the capacity of the plant, a transmission main might be sized to serve the utility until buildout of the service area and therefore could serve all new-growth ERCs from all future plant expansions. Understating the number of new-growth ERCs to be served by the asset behind a capital project cost can overstate the impact fee per ERC. Reasonable assumptions should be developed for each project.

One issue to consider is the treatment of renewal and replacement (R&R) projects in a multiyear capital improvement program for the purpose of calculating impact fees. The most conservative approach is to not include any R&R projects in the calculations. However, R&R projects are typically replacing existing fixed assets with more expensive assets (e.g., because of historical inflation and technology improvements). If the new assets represented in the capital improvement program are included in the impact fee calculations and the assets being replaced are removed from the calculations, the utility then has essentially created a pro forma fixed-asset register that right-sizes, or updates into today's dollars, the costs of the facilities in service that have the capacity to serve new growth. (Once the capital improvement is executed, the then-current fixed-asset register would presumably match the pro forma fixed-asset register developed years earlier.)

Existing customers may not be responsible for the needs for all of the utility's R&R projects. Sometimes assets must be replaced because of premature aging (e.g., as a result of contaminant intrusion) or as a result of limited or no use (e.g., the assets were built for growth that never materialized as expected).

Another issue relates to the costs of relocating water and wastewater lines because of the widening of roads necessitated by new growth. Can the incremental increase in the costs of the lines—or any upsizing component—be recovered through water and wastewater impact fees or must the costs be recovered through user rates? Legal opinions differ regarding this question.

The incremental cost difference between the new assets and the assets being replaced may not have a significant effect on the impact fee calculations. Yet if the utility's objective is to justify as high an impact fee as possible, including the incremental cost difference in the impact fee calculations (for the reasons previously explained) may be an option.

Determine how to treat reclaimed water capital costs. (Recommended practice.) The reclaimed water system is a form of (treated) wastewater disposal, and the capital costs associated with a reclaimed water system can justifiably be included in the wastewater impact fee calculations. However, reclaimed water, which is typically used for irrigation purposes, also reduces system potable water demand and provides a clear benefit to the water system. Without the availability of reclaimed water, the utility may need to invest in costly water treatment plant expansions; as such, it may be appropriate to include a portion of the reclaimed water system capital costs in the water impact fee calculations. Some

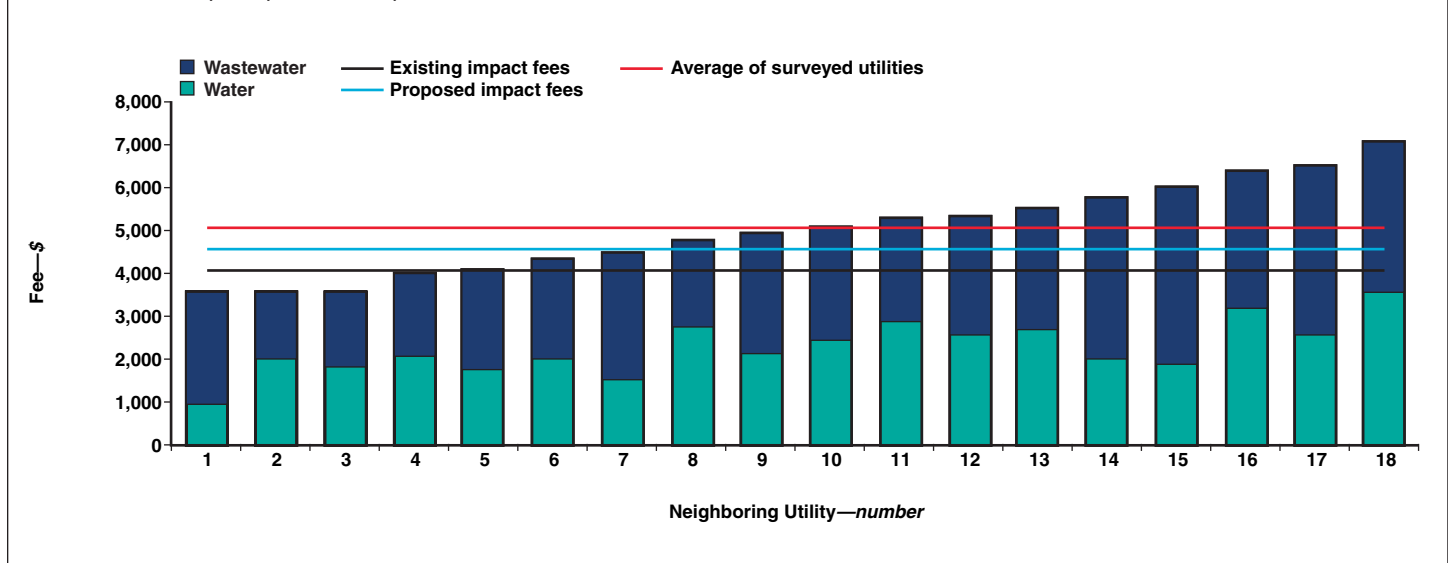
utilities assign 100% of the reclaimed water capital costs to the water system; (a 50–50 split is not uncommon).

Another option may be to develop a separate reclaimed water impact fee. However, not all customers may have reclaimed water service, and if the separate fee is only charged to customers with available reclaimed water service, the utility may experience lower impact fee collections than if the reclaimed water capital costs were 100% integrated into the wastewater and/or water impact fees. Also, some customers may be unwilling to buy into the reclaimed water system (i.e., pay the impact fee) if they have other available options such as installing onsite wells.

The report communicating the basis for the impact fee calculations should be clear and understandable by a layperson. (Sample state with statutory requirements for this practice: Utah.) A person reading the report should be able to easily understand the assumptions and allocation methodology, identify the source of each number in the impact fee calculation, check the math, and verify the “reasonableness.” If the impact fee calculations link to another document, such as a master plan, there should be cost reconciliations so that the reader can compare the two documents without difficulty (Table 4). With good communication, there is less probability that the development community would dismiss the impact fee calculations as smoke and mirrors.

The impact fee methodology and report should be reviewed by an outside legal counsel who specializes in impact fee law and has a professional knowledge of the utility industry. (Recommended practice.) Municipal and county attorneys may not have the expertise to determine whether a utility impact fee methodology and calculations adhere to all provisions of statutory and case law. Because of this, it is advisable that a utility obtain a legal opinion letter from an outside legal counsel who specializes in impact fee law and has a professional knowledge of the utility industry. Such opinion letters provide additional credibility to the impact fee study. Elected or appointed officials responsible for adopting any proposed changes to the impact fees may demand or expect a review by outside legal counsel of the impact fee methodology, calculations, and report. (The resolution or ordinance to adopt the impact fees can include language that such a review was performed and that the methodology was considered to be reasonable.)

Be able to explain why the utility's impact fees differ from those of other “neighboring” utilities. (Recommended practice.) As part of any impact fee review, a comparison of the utility's fees with those of other “neighboring” utilities should be prepared. A sample impact fee comparison is shown in Figure 1. There are several reasons why impact fees differ among utilities: source of supply, proximity to source of supply, type/complexity of treatment, effluent disposal method, availability of grant funding, administrative policies, time elapsed since last impact fee review, density within service area/size of system, utility life cycle (growth-oriented versus mature), and LOS standards. If the utility's water impact fee is higher than those of neighboring utilities, there may be a simple explanation (e.g., higher treatment costs resulting from use of a saltwater or brackish source instead of freshwater). If the wastewater fee is higher, perhaps the utility has newer treatment facilities with a deep injection well and reuse-based effluent disposal. It is

FIGURE 1 Sample impact fee comparison (for fees in effect December 2010)

difficult to provide fee recommendations to regulators unless there are valid reasons for the fee levels.

Using the LOS standards and impact fee amounts of other utilities, utility management can calculate what the fees of other utilities might be if they had the same LOS standards as the utility; this analysis could eventually be shared with regulators and the development community. For example, utility X has a water impact fee of \$3,500 per ERC and an LOS standard of 350 gpd, and utility Y has a water impact fee of \$2,600 per ERC and an LOS standard of 250 gpd. Utility Y's cost per gallon is \$10.40 (\$2,600 per ERC/250 gpd). If utility Y's LOS standard were 350 gpd, utility Y's impact fee might be \$3,640 (\$10.40 × 350 gpd). Therefore, it could be argued that utility X's water impact fee is competitive despite the \$900 difference in the fee amount. This comparison could alternatively remain at the cost-per-gallon level. Utility X's cost per gallon is \$10.00 (\$3,500/350 gpd), which is lower than that of utility Y.

Even if the utility's impact fees are extremely competitive, the utility should still perform all of the due diligence actions outlined in this article. The utility impact fees added to other impact fees that may have been imposed by the local government (e.g. roads, parks, law enforcement, fire protection, ambulance/emergency medical services, schools, correctional facilities, government buildings, and so on) may create a total cost to a development that may prompt the developer to challenge every single number in every fee.

Compare the calculated fee with the cost per gallon of the latest treatment plant expansion applied to the LOS standard. (Recommended practice.) The total cost of the latest treatment plant expansion can be divided by the capacity of the plant (e.g., may be expressed in million gallons per day) to obtain a cost per gallon. For example, if a utility spent \$50 million to complete a 5.0-mgd water treatment plant expansion, the cost per gallon would be \$10 (\$50,000,000/[5.0 mgd × 1,000,000]). If the LOS standard of the utility is 250 gpd per ERC, the cost

per ERC is \$2,500 (\$10 cost per gallon × 250 gpd). It is important to make sure that both the capacity and the LOS standard are expressed on the same basis (e.g., average daily flow or maximum-day flow). This type of information could also be shared with the development community and other interested parties to help them understand that the fee level, or at least the treatment component of the impact fee calculation, is reasonable. (The transmission component of the fee would be additive.)

Be able to explain why the utility's calculated fees have changed since the last review. (Recommended practice.) Differences could be caused by such factors as inflation, increased regulations that affect the cost of treatment, changes in the LOS standards, changes in the projected capital spending, changes in expansion plans, actual spending versus what was projected in the previous review, or other changes in assumptions.

Obtain input from the development community before requesting official adoption of the impact fees. (Sample states having statutory requirements for involving advisory committees consisting of members of the development community include Arizona, Georgia, Idaho, Indiana, Montana, Nevada, New Mexico, and Texas.) Many utilities have community outreach programs, and some cities and counties have established by ordinance development advisory committees that represent various professionals in the development industry such as architects, contractors, developers, engineers, and planners. After the impact fees have been calculated and the report has been written, utility officials should consider submitting the materials to developers and homebuilder associations or advisory committees and to later meet with the committees to answer questions and obtain input. When requesting adoption of the impact fees, utility officials can present the schedule/dates of development community involvement and communicate the recommendations made by the development community and actions taken by the utility to address the recommendations.

Growth-oriented utilities should perform updates every few years to keep the impact fees current; review the impact fees concurrently with every update to the utility's master plan. (Sample states with statutory requirements for capital program/land use reviews or updates every few years include Idaho, Montana, Nevada, New Mexico, and Rhode Island.) Some utilities have approved policies that mandate impact fee reviews every few years. For growth-oriented utilities, periodic updates are recommended. Population-planning estimates generated during housing booms may require the utility to incorporate expensive capacity expansions in its multiyear capital program that increase the calculated impact fees. When population estimates are lowered and the expansions are postponed, it is appropriate to adjust (i.e., lower) the impact fees accordingly to avoid challenges to the fee level. Usually there is no need for a utility with a built-out service area to update its impact fees unless the utility expects a significant amount of redevelopment or infill development or is planning to sell some of its unused capacity to another utility.

Do not index impact fees unless the capital costs used in the impact fee calculations have no allowance for future inflation. (Recommended practice.) Some utilities have adopted indexing clauses in their impact fee resolutions or ordinances that enable the utility to increase the impact fees for inflation—as measured by changes in the consumer price index or a construction cost index such as the one published by the *Engineering News-Record*—in the absence of a formal review or public hearing. This practice is not advisable if the capital costs taken from the capital improvement plan on which the impact fees are based already have a built-in allowance for future inflation, because the utility should avoid double-counting costs. Many capital improvement program cost estimates have sizable allowances for both inflation and contingencies. If growth-oriented utilities perform periodic reviews as this article recommends, impact fees will remain representative of the current infrastructure capital costs.

Any impact fees charged to entities outside municipal limits should be cost-based. (Recommended practice.) Some utilities have adopted outside-municipality surcharges (e.g., 25%) applied to impact fees as well as user rates. Outside-municipality surcharges have also generated controversy and litigation, and there is a possibility that a blanket outside-municipality surcharge applied to an impact fee could make the total collected amount exceed the development's or entity's pro-rata share of the infrastructure costs (i.e., the fee exceeds the benefit cost) and thus could potentially be challenged as a violation of case law pertaining to impact fees.

If utility incurred additional costs to extend lines and build infrastructure outside of the municipal boundary to accommodate the outside-municipality developments, a higher impact fee than what is charged to inside-municipality developments may be justified. However, the outside-municipality fee should be quantified based on actual cost. With more advances in monitoring equipment and other technologies, the actual costs to provide service can be more readily identified today than they were a few decades ago. The impact fee charged to an outside-municipality customer should be considered fair and equitable when considering each party's investment in the service arrangement.

REQUIRED AND RECOMMENDED WATER, WASTEWATER, AND RECLAIMED WATER IMPACT FEE ACCOUNTING, IMPLEMENTATION, AND USE PRACTICES

It is critical for a utility to proactively conform to all applicable laws and standards for impact fee accounting. Required and recommended impact fee accounting, implementation, and use practices for utility management are discussed in this section.

Prepare for the cyclicity and timing of impact fee collections by maintaining a strong financial position and high credit rating as well as adequate cash reserves for capital spending. (Recommended practice.) There are often significant differences in timing among a utility's capacity construction schedule, the dates on which the capacity becomes available, and the receipts of impact fees from the new growth to be served by such capacity. Because impact fee collections are one of the utility's most unpredictable revenue streams and can vary significantly with changes in the economy, the utility should not be overly dependent on impact fees to fund its expansion program. Sometimes utilities issue debt to fund growth-related projects and then expect the impact fee collection stream to pay the annual debt service. Although this strategy may result in lower user rates during periods of high growth, impact fee collections are likely to diminish during economic downturns, requiring the debt service to be paid with user rate revenues. In this situation, significant additional user rate increases may be required to meet rate covenants.

To manage the timing of cash flows associated with an expansion program, a utility should maintain a strong system financial position to enable the utility to secure optimal credit ratings and therefore lower interest rates on debt financings and maintain adequate cash reserves for capital spending to serve as working capital for the expansion program. Credit-rating agencies (i.e., Moody's Investor Services, Standard & Poor's Financial Services, and Fitch Ratings) frequently publish their criteria for evaluating the creditworthiness of utilities. High credit ratings are typically linked to strong debt-service coverage ratios and favorable cash positions. Because of the greater unpredictability of impact fee collections versus user rate revenues, the rating agencies place more value on the all-in net revenues debt-service coverage ratio (net revenues divided by the sum of senior and subordinate lien annual debt service) calculated without impact fees (i.e., because of lower financial risk). Therefore, the utility's user rates should ideally be set at a level to achieve operating margins that result in strong all-in net revenues debt-service coverage and allow the utility to fund its capital needs—including those related to growth—through a mixture of debt and pay-as-you-go financing. If the utility's net revenues without impact fees can pay all system debt service plus provide strong coverage and if the utility has adequate working capital for capital spending, the utility should be in a good position to handle fluctuations in impact fee collections.

The utility must follow applicable customer notification/effective date laws. (Sample states with statutory requirements for this practice include Arizona, Florida, Utah, and West Virginia.) Florida and Utah have a requirement that notice must be provided no less than 90 days before the effective date of an ordinance or resolution imposing a new or increased impact fee. However, the 90-day waiting period does not apply if an impact

TABLE 4 Sample reconciliation with master plan document

Reconciliation Parameters	Project Costs—\$ millions Fiscal Years 2010–20		
	Water	Wastewater*	Total
Projects in master plan CIP			
Water system growth-driven projects	23.2	NA	23.2
Water system renewal, replacement, and enhancement projects	105.5	NA	105.5
Wastewater system growth-driven projects	NA	9.7	9.7
Wastewater system renewal, replacement, and enhancement projects	NA	197.2	197.2
Total projects	128.7	206.9	335.6
Adjustments to remove distribution/collection projects	-19.8	-12.2	-32.0
Adjustments to remove replacement projects 100% allocable to existing customers	-4.2	-6.5	-10.7
Adjustments to remove general-related and other project costs (e.g., consulting projects) not recognized in fee determination process	-26.6	-35.4	-62.0
Adjustments for project costs moved from CIP analysis fixed-asset analysis to be consistent with existing capacity assumptions	-2.3	0	-2.3
Total CIP project costs recognized in impact fee study	75.8	152.8	228.7
Percent of total CIP	58.9	73.9	68.1

CIP—capital improvement program, NA—not available

*Amounts include reclaimed water projects

fee is being decreased, suspended, or eliminated. As a courtesy to the development community, the utility can make full use of various media (e.g., newspapers, public announcements, letters, Internet) to communicate changes in fees as well as to explain any justification for the changes.

Each impact fee should have a dedicated fund or account. Any interest earned in the fund should be restricted to that account.

(Sample states with statutory requirements for this practice include Arizona, California, Colorado, Florida, Georgia, Hawaii, Idaho, Indiana, Maine, Montana, Nevada, New Hampshire, New Mexico, Rhode Island, South Carolina, Texas, Utah, West Virginia, and Wisconsin.) Some utilities have historically comingled impact fee collections with other utility revenues and included them as a component of working capital reserves. There are also utilities that have historically had a single fund to account for both water and wastewater impact fees. If a local governmental entity has adopted an impact fee to address its infrastructure needs, the entity should account for the revenues and expenditures of the impact fee in a separate accounting fund (e.g., there should be a water impact fee fund *and* a wastewater impact fee fund), and any interest earned in the fund is restricted to the fund and cannot be used for operating requirements.

Most authorizing utility revenue bond resolutions or ordinances recognize the restriction of interest income earned from impact fee collections, and any such restricted income cannot be included as a component of gross revenues when calculating debt-service coverage.

Calculate and maintain a debt expansion percentage. (Recommended practice.) Impact fees can be used to make principal and

interest payments on growth- or expansion-related debt; therefore, it is important for utilities to know the percentage of annual debt-service requirements that are expansion-related and thus eligible to be paid with impact fees.

Ideally, the utility should have detailed accounting of how each dollar from debt proceeds was spent. Absent such information, project descriptions and estimated costs in bond official statements and loan agreements can be useful in making assumptions on what portion of the debt service is expansion-related. If the outstanding debt includes refunding bond issues, the expansion percentages should be estimated based on the project descriptions and costs in the original revenue bond issues (e.g., may need to reference an earlier official statement).

Table 5 contains a sample debt expansion percentage calculation. As the debt mix of the utility changes, the debt expansion percentage calculation should be updated as appropriate.

Use impact fees to first pay for expansion-related capital projects, then expansion-related debt service. (Recommended practice.)

Although a utility has the ability to use impact fees to pay for either expansion-related capital projects or expansion-related debt service, the best practice as recognized by credit-rating agencies is to first use the fees to directly pay for growth-related capital projects. This practice enables the utility to reduce future borrowings—and the associated borrowing costs—to the benefit of all ratepayers (i.e., lower user rates).

Spend the impact fees in a timely manner. (Sample states with statutory requirements for this practice include Arizona, California, Hawaii, Indiana, Nevada, New Hampshire, New Mexico, Rhode Island, Texas, Utah, West Virginia, and Wisconsin.)

TABLE 5 Sample debt-service expansion percentage calculation

Project Analysis for Each Debt Issue												
Bond Issue 2												
Project	Amount Borrowed \$	Water/Wastewater Allocation—%		Expansion %	Water System Projects			Wastewater System Projects			Total System Projects \$	
		Water	Wastewater		Expansion-related \$	Nonexpansion Related \$	Total \$	Expansion-related %	Nonexpansion Related \$	Total \$		
Expansion of the reverse osmosis water treatment plant	18,000,000	100.0	0.0	100.0	18,000,000	—	18,000,000	—	—	18,000,000	—	18,000,000
Water and wastewater main rehabilitation	6,000,000	40.0	60.0	0.0	—	2,400,000	2,400,000	—	3,600,000	3,600,000	—	6,000,000
New wastewater transmission main	8,000,000	0.0	100.0	100.0	—	—	—	8,000,000	—	8,000,000	—	8,000,000
New wells	3,000,000	100.0	0.0	100.0	3,000,000	—	3,000,000	—	—	3,000,000	—	3,000,000
Lift station rehabilitation	1,000,000	0.0	100.0	0.0	—	—	—	—	1,000,000	1,000,000	—	1,000,000
Total	36,000,000				21,000,000	2,400,000	23,400,000	8,000,000	4,600,000	12,600,000	4,600,000	36,000,000
Percent of total					58%	7%	65%	22%	13%	35%		100%
Expansion percentage					90%	10%	100%	63%	37%	100%		100%

Calculating Overall Debt-service Expansion Factor												
Outstanding Debt Issue	Total Debt-service Payments 2012 \$	Water System		Debt Service \$	Expansion %	Expansion-related Debt Service \$	Debt Service \$	Expansion %	Expansion-related Debt Service \$	Total Debt Service \$	Expansion-related Debt Service \$	Total System
		Water	Wastewater									
Bond Issue 1	9,927,500	54.5	45.5	5,410,488	95	5,139,963	4,517,013	93	4,200,822	9,927,500	4,200,822	9,340,785
Bond Issue 2	2,458,944	65.0	35.0	1,598,314	90	1,434,384	860,630	63	546,432	2,458,944	546,432	1,980,816
Bond Issue 3	14,249,788	72.0	28.0	10,259,847	72	7,387,090	3,989,941	82	3,271,751	14,249,788	3,271,751	10,658,841
State revolving fund loan 1	1,246,301	0.0	100.0	—	NA	NA	1,246,301	100	1,246,301	1,246,301	1,246,301	1,246,301
State revolving fund loan 2	1,524,424	0.0	100.0	—	NA	NA	1,524,424	100	1,524,424	1,524,424	1,524,424	1,524,424
Total payments	29,406,957			17,268,649		13,961,437	12,138,309		10,789,730	29,406,957	10,789,730	24,751,167
Overall debt service expansion factor						81%			89%			84%

State and local governments often have a codified requirement that if impact fees are not spent in a specified period (e.g., five to 10 years), they must be returned to an owner or developer, sometimes with interest. However, some states allow for an agency to adjust the time frame on spending funds if the agency revises its impact fee documentation to address delays in construction. Utility management must understand the relevant laws governing the time constraints of impact fee use and ensure that the utility's accounting practices fully conform to the requirements.

Demonstrate that impact fee collections during the impact fee calculation period are projected to be insufficient to pay for all growth-related capital projects and debt service. (Recommended practice.) On the basis of the debt expansion percentage calculation discussed previously, the projected capital improvement program, and the projected impact fee collections, a utility can create a table (Table 6) that can help communicate that the calculated impact fees are reasonable and that existing customers (those paying monthly user rates) are subsidizing growth in the near-term.

The utility will not recover all of the capital costs associated with the available capacity until all of the ERCs that can be served by such capacity have connected to the system. If the utility overbuilt its facilities during the housing boom of 2005 and 2006, for example, then, given current economic conditions, full capacity utilization may take decades (or may never happen), and user rates may have to continue paying for the unused capacity.

Utilities should maintain a record of growth-related capital projects and debt service paid with user rates or operating reserves because of insufficient impact fee collections. A utility may be able to justify reimbursing operating reserves at a later date with future impact fee collections.

Review developer agreements to ensure that they conform with current laws and accepted practices. (Recommended practice.) The utility's developer agreements should enable the utility to increase growth-related fees charged to new development and to implement new fees and changes to existing fee structures. Standard agreements should be reviewed periodically to ensure conformance with all new legislation.

WATER, WASTEWATER, AND RECLAIMED WATER ALTERNATIVE IMPACT FEE CALCULATION

There are many accepted methods for determining the number of ERCs for a given development. Common methods include ERC determinations based on plumbing fixtures, meter size, attributes, and historical flow. Each method has advantages and disadvantages in estimating capacity demand, as shown in Table 7, and typically results in a different ERC count for a given development. When scouting potential areas to develop, developers will often consider not only the impact fee amount per ERC but also the ERC determination methodology.

With all of the accepted methods, the number of calculated ERCs is applied to the impact fee per ERC to arrive at the total amount of impact fees to be paid by an applicant. To help avoid impact fee litigation, it is important for utilities to have an official procedure for applicants to submit an alternative impact fee calculation—this may be required by state law. Georgia, Hawaii, Idaho, Indiana, Montana, New Hampshire, Oregon, Utah, and Wisconsin have this statutory requirement. If an applicant believes that the nature, timing, or location of a proposed development would make it likely to generate fee impacts costing less than the amounts calculated under the utility's current methodology for determining the number, he or she has the right to submit

TABLE 6 Sample projected recovery of growth-related capital costs and debt service through impact fees and capital financing recovery fees

Description	Fiscal Year Ending September 30						Total
	2011 \$	2012 \$	2013 \$	2014 \$	2015 \$	2016 \$	
Projected impact fee collections	6.51	6.51	6.51	6.51	6.51	6.51	39.03
Projected capital financing recovery fee collections	1.21	1.39	1.50	1.50	1.50	1.50	8.61
Total collections	7.72	7.89	8.01	8.01	8.01	8.01	47.64
Growth-related projects in CIP	10.36	0.33	2.03	6.33	0.33	3.83	23.22
Growth-related debt service	11.14	11.14	11.14	11.14	11.14	11.61	67.29
Total growth-related projects and debt service	21.49	11.47	13.17	17.47	11.47	15.45	90.51
Difference	<u>(13.78)</u>	<u>(3.57)</u>	<u>(5.16)</u>	<u>(9.46)</u>	<u>(3.46)</u>	<u>(7.44)</u>	<u>(42.87)</u>
Total difference	(42.87)						
Impact fee starting fund balances	16.34						
Total shortfall to be recovered from existing customers during forecast period	<u>(26.52)</u>						

CIP—capital improvement program

*Numbers shown are in millions of dollars.

TABLE 7 Comparison of ERC determination methodologies

ERC Determination Methodology	Advantages	Disadvantages
Flows based on plumbing fixtures (Standard Plumbing Code)	Based on industry load demand standards; each fixture has the potential to handle certain amount of flow, and ERC value reflects such potential	May not reflect differences in customer characteristics (attributes); potential difficulties in surveying existing establishments
Meter size (AWWA equivalent ratios)	Easiest to administer; used by many utilities; usually based on published AWWA-rated maximum flow capacity for each meter size	Larger meters have diverse usage characteristics; does not fully capture differences in demand characteristics of differing facilities with same meter sizes (e.g., office building versus carwash)
Flows based on customer attributes (e.g., flow per seat, rooms, square feet)	Better indicator of actual use compared with fixture- or meter-based approach that does not consider how facility will be used	Potential difficulty in surveying existing establishments (some may not be easily categorized); customers of same type could have different plumbing configurations and thus differences in demand; in redevelopment, additional capacity fees may be required for redevelopment of particular property even if no change in meter size or overall number of fixtures compared with original development
Flows based on historical use records (water use)	Based on empirical data for actual (similar) customers being served; readily available data	Water use does not necessarily correspond to wastewater demand (outdoor/irrigation uses); variance of annual usage over time may skew calculation of demand; similar customers could have different plumbing configurations and therefore differences in demand; data for "similar" customers in service area may not be available

ERC—equivalent residential connection

an alternative impact fee calculation. This alternative calculation must be prepared and certified by a qualified professional in the utility industry under generally accepted methods. The purpose of the alternative impact fee calculation is not to simply switch one accepted ERC determination for another, but to present compelling evidence that the ERC calculations under the current method significantly overstate the applicant’s capacity demand. If the city/county manager does not accept the alternative impact fee calculation, the applicant may appeal to the governing board, commission, or council.

The applicant is often expected to pay the impact fee in full as calculated under the utility’s current method in advance of the alternative impact fee review by the municipality. The utility may have the option of charging a nonrefundable alternative impact fee review fee. The alternative impact fee review policy should specify the time frame of the various stages of review (e.g., the utility director will complete the review within a predetermined time).

If the alternative impact fee calculation is accepted, the utility should still reserve the right to "true-up" the calculation based on the actual use of the development once connected to the system because it is important that each customer pay his or her fair share. If actual consumption during a specified period (e.g., 24 months) after initiation of service reflects a greater demand on the water, wastewater, and/or reclaimed water facilities than what was represented in the alternative fee calculation, the utility should retain the right to increase the total amount of impact fees collected from the applicant.

There are several examples of alternative impact fee calculation procedures available in city and county ordinances. Utilities that have not yet established a formal procedure can reference those of their peers and derive one that fits their organization.

DEVELOPING A COMPREHENSIVE WATER AND WASTEWATER IMPACT FEE POLICY

Utility management should work with regulators to develop and approve a detailed impact fee policy that establishes the purpose of the impact fees, fee amounts, and when the fees must be paid; definition of an ERC and ERC determination by customer class for impact fee purposes (e.g., single-family residential, multifamily residential, nonresidential, irrigation); general design standards for the impact fees per ERC (e.g., what costs are recovered through the fees, LOS standards); how the fees will be used and the time frame for spending the fees; accounting standards for the fees; how often the impact fees should be reviewed; and the procedure by which an applicant submits an alternative impact fee calculation. Rating agencies often request copies of these policies when evaluating a utility’s creditworthiness. As new federal or state impact fee legislation is enacted or as case law regarding impact fees evolves, the utility should update the impact fee policy as appropriate to demonstrate the commitment and intent to be in full compliance with all impact fee rules and regulations.

CONCLUSION

The outlined impact fee design, accounting, implementation, and use criteria and practices in this article are based on the authors’ knowledge of current statutory and case law as well as experience in designing impact fees (and other growth-related fees) and working on impact fee issues with different utility clients, attorneys, consulting engineers, financial advisors, and members of the development community. It is critical for utility managers to understand the topics and issues addressed in this article because impact fees and other growth-related fees continue to be an important funding mechanism for growth-related utility infrastructure.

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