City and County of Honolulu, Hawaii

Ratings
New Issue
Wastewater System Revenue
Bonds Senior Series 2001 .......... AA–

Outstanding Debt
Wastewater System Revenue
Bonds Senior Series 1998 .......... AA–
Wastewater System Revenue
Bonds Junior Series 1998 .......... A+

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New Issue Details
Approximately $140,000,000 Wastewater System Revenue Bonds (First Bond Resolution) Senior Series 2001 are expected to price through a syndicate led by Salomon Smith Barney on or about June 11. Optional and mandatory redemption features are yet to be determined.

Purpose: Bond proceeds will partially finance portions of the system’s 20-year, $2.1 billion capital improvement program.

Outlook
The medium-term outlook is stable. The system’s favorable and diverse customer revenue base, sound financial operations, and internal policies, as well as adequate treatment capacity, with little growth-related pressure, have satisfactorily positioned the enterprise, providing for adequate financial flexibility. The enterprise has embarked on a large $2.1 billion capital improvement program (CIP), mostly for nondiscretionary purposes related to environmental issues. The system benefits from adequate treatment capacity, with little expansion required through 2020. The customer base is primarily residential, with governmental and resort entities generating the highest percentage of sales. Rates are currently moderate and competitive when compared with peer systems in Hawaii and the nation. Rate projections indicate aggressive increases, which are necessary, as the system continues to issue debt as part of its ongoing CIP. The enterprise benefits from a service area with strong tourism-based underpinnings, as well as a significant government sector.

Rating Considerations
The enterprise provides wastewater service for the entire island of Oahu (City and County of Honolulu). The service area is divided into eight wastewater basins for administrative and planning purposes. Each basin has an accompanying treatment plant. Service is provided to approximately 130,000 accounts, representing a residential population of 600,000. Of the total accounts, 123,000 are residential, lending stability to the customer base. The average total volume of wastewater processes by the wastewater system is 113.6 million gallons per day (mgd).

The system’s financial position is sound. Fiscal 2000 net revenues, after all obligations, were $25.5 million, additionally adding to the enterprise’s good reserve levels. Rates are moderate compared with income and peer groups; however, a series of rate increases are scheduled in conjunction with the implementation of the CIP and future bond issuance. User concentration is minimal, with the top 10 ratepayers providing only 2.5% of wastewater sales.

Bond proceeds will be used to finance a portion of the system’s near-term capital needs, which are driven by requirements resulting from consent decrees entered into with state and federal regulatory bodies. Financial operations, including aggressive rate increases, are projected to produce good senior lien debt service coverage of 6.8 times (x) in fiscal 2002 and 1.6x times in fiscal 2010, once $1.2 billion of additional debt is issued. Combined senior and junior lien debt service coverage is also projected to be adequate, with fiscal 2010 net revenues providing debt service coverage of 1.3x.

July 6, 2001
Credit concerns revolve around the extensive CIP, which is primarily driven by consent decrees between the enterprise and state and federal regulatory bodies. The 20-year, $2.1 billion will require the fulfillment of certain milestones to meet state and federal requirements. Failure to meet milestones and fulfill requirements may exacerbate environmental issues and present financial liability, which may hinder operational and financial flexibility. As mentioned, rates are expected to increase dramatically to fund the ongoing CIP.

**Strengths**
- Essential service.
- Adequate treatment, with little growth-related pressure.
- Tourism-based service area has strong underpinnings with stable economic fundamentals, including significant government sector.
- Good projected revenue bond coverage.
- Favorable revenue mix.

**Risks**
- Large and ongoing CIP, requiring aggressive rate increases.
- System must fulfill requirements of state and federal agencies’ consent decrees.

**Legal Provisions**
Legal provisions are satisfactory and fairly standard for a utility system in the middle of a large capital program. The additional bonds test permits the flexibility to comply with the rate covenant needed to fund a large plan. Internal financial targets established by policy strengthen the financial profile, and projected coverage exceeds the targets. The internal targets are 1.60x senior revenue bond debt service and 1.25x coverage of all revenue bond debt service. Policies also call for a three-month operating reserve.

The rate covenant under the first bond resolution calls for debt service coverage by net revenue of 1.20x. The rate covenant under the second bond resolution calls for debt service coverage by net revenue of 1.10x. A common reserve account under both resolutions is funded to the maximum level permitted by law. The additional bonds test for both resolutions requires compliance with the respective rate covenant by either a historical or forward test. If interest is capitalized, the forward test is applied beginning in the period when interest is no longer capitalized. Fitch considers the legal provisions in the transaction to be adequate.

**System**
The wastewater system is divided into eight wastewater basins, with each served by a wastewater treatment plant (WWTP). In addition to treatment facilities, the system includes collection, pumping, and other related facilities. Approximately 130,000 separate accounts are serviced by the system. Of the 130,000 accounts, 123,000 are residential, representing 77.8% of total sewer service charge revenue, and the remaining 7,000 nonresidential customers represent 22.2%.

Aggregate dry weather design capacity is 144.2 mgd, well in excess of 2000 flow of 113.31 mgd and slightly below the 145.1 mgd expected in 2020. The system's three largest plants treat more than 94% of wastewater flows.

The city and county's Department of Environmental Services (the department or the enterprise) is responsible for the operation, maintenance, compliance monitoring, and facility planning and programming for the wastewater system. The department is composed of approximately 590 employees in support of the enterprise.

**The Environment and Capital Improvements**
The wastewater system is divided into eight wastewater basins, each served by a WWTP. The system encompasses more than 500 square miles, with collection and transmission pipes leading into separate WWTPs. Aggregate dry weather design capacity is 144 mgd, adequate capacity through fiscal 2020 and well in excess of fiscal 2000's flows of 113.3 mgd. The system's three largest plants treat more than 90% of the wastewater flows. A National Pollutant Discharge Elimination System permit or the state Department of Health Underground Injection Control permit regulates the discharge of treated wastewater into receiving waters. Most plants treat to the secondary level, yet two have 301(h) waivers and only meet primary requirements while implementing deep-ocean outfall. Furthermore, six of the eight plants meet national and state discharge requirements. The Sand Island Wastewater Treatment Plant is sometimes out of compliance, as it experiences problems with the 30% biological oxygen demand removal limit. Some of the capital projects will upgrade the existing processes and fix the problems at this facility.
other plant, the system’s eighth, is owned by the state and operated by the department and has also not been in compliance consistently. However, this plant is the system’s second smallest, as measured by design and current and projected flow. Management is requesting state funds to bring this plant into compliance, estimated at $15 million.

Although there are some environmental issues resulting from treatment deficiencies, the majority of the department’s capital plan is targeted to address environmental concerns plaguing the collection and transmission system. From fiscal years 1994–1999, the department worked with the community, the federal Environmental Protection Agency (EPA), and the state Department of Health to develop several consent decrees. The most significant consent decree, number 309, resulted from the EPA’s filing a lawsuit. This decree established milestones for the improvement of the wastewater system. Interim preventive maintenance procedures started in 1994 and will continue through 2019, the final year of the decree. The sewer rehabilitation and the infiltration-and inflow plan are being phased in, with ultimate completion intended by the end of the 20-year decree. Supplemental environmental projects related to biosolids reuse and beneficial effluent reuse have near-term completion dates.

The four-year (fiscal years 2001–2005) CIP expenditures total $362 million, to be funded by $125 million of 2001 bonds, state revolving fund (SRF) moneys, internal funds, and future bonds. The 20-year CIP has a total cost of $2.1 billion, which will be funded primarily by revenue bonds. Some pipes in the collection system are approaching the end of their useful lives. Major pipelines were put in operation 40–100 years ago, and the underground environment is harsh due to the saline content of the high water table. The deteriorated condition of the system affects overall system performance most during periods of wet weather, when operations and maintenance (O&M) expenditures escalate as a result. Approximately 69% of the CIP expenditures are for the collection system, with the remaining 31% for the WWTPs. However, only 13% of the costs are associated with growth and only 19% are discretionary: most of the CIP and associated debt is necessary to make mandated improvements to the existing system. About 81% of the 20-year CIP projects are nondiscretionary, including the required consent decree projects (40%), permit or regulatory improvements (25%), expansion of existing facilities (13%), safety/public health improvement projects (3%), and preventive projects (12%). Expenditures over the next 20 years should eliminate current and projected critical deficiencies.

### Rates

The power to set rates and charges is maintained by the city council. However, it is the director of environmental services who recommends a rate increase, which is then subject to approval by city council. Over the past eight years (fiscal years 1993–2001), rates have remained stable yet generated adequate balances to maintain the wastewater system’s self-sustaining status. Currently, a single family’s residential monthly sewer charge is $33.35, or $400 on an annual basis. The department’s fees are distributed to customers on a combined statement with the water system.

The City and County of Honolulu’s residential sewer service charges compare favorably with those of other major cities. Rates have been designed to avoid affecting the economic vitality of the community while also allowing the department to provide safe, dependable service. Base rates were last increased in fiscal 1993 (by 30%). Forecasts indicate the need to increase rates to progress with the necessary capital developments. Starting in fiscal 2004, rates will increase between 6.5% and 13.0% each fiscal year through fiscal 2010. Therefore, by fiscal 2010, rates will have almost doubled, resulting in a $65.45 average monthly residential charge. Although this represents a dramatic increase, most capital improvements are necessary to meet environmental concerns, and rates will still be somewhat moderate when compared with other major cities that have large infrastructure needs.

### Finances

The wastewater system’s revenue mix is favorable. Residential customers account for 78% of sewer system charges, with the remaining 22% from nonresidential or commercial and industrial users. As of fiscal 2000, the department had accumulated a strong cash balance of $142 million, current assets of $184 million, yet only $29 million in current liabilities and $403 million in various debt instruments. Revenues have been relatively flat since fiscal 1994, with only a small number of new customers added and no rate increases. From fiscal years 1997–2000, total revenues increased an average 3.5% annually, or 11% overall. However, expenses have decreased 10% per year since 1997 because the department has become substantially more efficient and cost conscious. The 10-year financial forecast
Public Finance

Cash Flow — City and County of Honolulu Department of Environmental Services
($000, Fiscal Years Ending June 30)

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<td>Sewer Service Charges</td>
<td>121,703</td>
<td>111,300</td>
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<td>1,700</td>
<td>1,800</td>
<td>1,900</td>
<td>2,100</td>
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<tr>
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<td>2,900</td>
<td>6,600</td>
<td>4,400</td>
<td>4,800</td>
<td>4,200</td>
<td>4,800</td>
</tr>
<tr>
<td>Total Revenues</td>
<td>127,903</td>
<td>116,700</td>
<td>123,600</td>
<td>131,600</td>
<td>167,600</td>
<td>204,100</td>
<td>237,000</td>
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| Expenses                |       |       |       |       |       |       |       |
| Total Expenses          | 63,923 | 66,400 | 69,700 | 78,900 | 82,100 | 88,500 | 94,800 |
| Net Revenues            | 63,980 | 49,300 | 50,600 | 52,800 | 86,500 | 115,600 | 142,200 |
| Senior Lien Debt Service| 2,788  | 2,600  | 7,400  | 20,100 | 51,000 | 71,000 | 87,000 |
| DSCR (x)                | 22,94  | 18,96  | 6,84   | 2,63   | 1,70   | 2,00   | 1,83   |
| Junior Lien Debt Service| 12,416 | 11,500 | 11,600 | 12,500 | 14,800 | 16,700 | 20,800 |
| Senior and Junior DSCR (x) | 4,21   | 3,56   | 2,88   | 1,62   | 1,31   | 1,32   | 1,32   |
| General Obligation Debt Service and SRF Notes | 23,266 | 21,900 | 12,500 | 9,300  | 10,700 | 12,000 | 13,400 |
| Total Debt Service      | 38,470 | 35,900 | 31,400 | 41,900 | 76,400 | 99,600 | 121,300 |
| Total Debt Service (x)  | 1,66   | 1,37   | 1,61   | 1,26   | 1,13   | 1,16   | 1,17   |
| Net Income**            | 25,510 | 13,400 | 19,200 | 10,900 | 10,100 | 16,000 | 20,900 |
| Monthly Sewer Service Charge ($) | 33,35  | 33,27  | 33,18  | 36,83  | 47,03  | 56,90  | 65,45  |
| System Facility Charge ($) | 1,146  | 1,146  | 1,146  | 1,180  | 1,251  | 1,328  | 1,409  |

*Projected. **Prior to capital expenditures. DSCR — Debt service coverage ratio. SRF — State revolving fund. Source: Consultant.

Projects total revenues to increase substantially (85%) as a result of the planned rate increases. In contrast, the forecast projects only a modest increase of 4% in O&M expenses annually through fiscal 2010. Rate increases are necessary to grow the revenue base, and although the department plans to increase rates in the future, no recommendations have been made to the city council; therefore, the city council has yet to approve any adjustments. Fitch will continue to monitor the city council’s willingness to incorporate the dramatic forecast rate increases since they are necessary to fully meet the consent decree timeline established by the EPA.

Higher revenue requirements and rate increases are driven by debt service needs associated with the CIP. Despite an aggressive revenue bond issuance schedule, debt service coverage by net revenue is expected to remain above 1.60x for senior lien bonds, 1.29x for junior lien bonds, and 1.10x on all debt obligations, including SRF notes and general obligation reimbursable bonds, throughout the 10-year forecast period. Forecasts appear slightly aggressive, since double-digit rate increases starting in fiscal 2004 and extending through fiscal 2006 are necessary to support debt service needs. Moreover, the financial plan and timing is only somewhat flexible since system maintenance needs are driving the CIP and debt issuance schedule.

Service Area

The wastewater system services the entire island of Oahu (City and County of Honolulu), covering 500 square miles. For administrative and planning purposes, the district is divided into eight basins. Total accounts exceed 130,000, with the vast majority being residential.

The top 10 users comprise a low 2.6% of water sales. The top three users are the University of Hawaii, Honolulu International Airport, and Hilton Hawaiian Village. These three entities total 1.2%. Other top users include hotel and governmental entities.

Honolulu’s economy is dominated by well-developed tourism, with an element of diversity and stability added by a strong military presence and the city’s role as Hawaii’s capital, business, and commercial center. Tourism activity is recovering from a nearly decade-long decline, when it suffered first from economic weakness in California and, more recently, from economic troubles in Japan and throughout Asia.

Honolulu’s economy benefits from elements that add diversity and stability: a large military presence; the state capital; the University of Hawaii; and the business and commercial center of the state. About three-quarters of all state jobs are located in Honolulu. Government is the largest source of earnings for Honolulu residents at 33%, followed by services, with 27%, and trade at 14%. However, government is the
third largest employer at 22% of all jobs. Honolulu’s job base is led by services at 30% and trade at 22%. While a substantial portion of services and trade employment is generated by tourism, a portion also meets the needs of the city’s permanent residents.

The sizable military presence results from Honolulu’s strategic Pacific location, as well as the historic significance of Pearl Harbor. While military employment declined through 1993, it has been relatively stable since and is expected to remain at about the current level. The Army, Navy, Air Force, Marine Corps, and Coast Guard all have a presence on Oahu. The U.S. Pacific Fleet’s commander in chief is located at Pearl Harbor, as is the headquarters of the Third Fleet. Pearl Harbor’s tourist appeal is enhanced with the permanent berthing of the battleship USS Missouri. A bridge now connects Pearl Harbor with the Navy’s Ford Island. Plans are underway for a mixed-use development there. The Navy is seeking special legislation to allow private developers to participate in this development.

Honolulu’s employment base has exhibited small but consistent declines, falling 2.1% from 1995–1999. Given the dramatic losses in other economic indicators, these small annual losses show evidence of the government sector’s stabilizing influence. Also, the annual declines have decreased every year, beginning at 0.9% in 1996 and falling to 0.3% in 1999. A small gain is expected when final 2000 figures are released. The labor force responded more slowly to the economic weakness, resulting in rising unemployment through 1998. However, the level remained moderate and below the state average. Unemployment declined to an estimated 3.5% in 2000 from 4.9% in 1999. This year is the sixth consecutive year that unemployment has declined.

Income levels are 11% above the state and 20% above the national averages. Exceeding the national average partially reflects the high cost of living on the island. Despite the recent and prolonged downturn, per capita income has increased every year since 1990.