

Insurance for POTW Facilities

QUESTION

The following question was sent to member of the NACWA Legal Affairs Committee on February 9, 2010:

“We are writing to you as a member of NACWA’s Legal Affairs Committee with a request for information from a NACWA public utility member, who has asked the following question:

Do clean water utilities typically have insurance on all their facilities, such as for natural disasters like earthquake damage or floods? Are there any other cost-saving measures in regards to insuring facilities that NACWA members could share?”

RESPONSES

The following responses were received from members of the committee:

Response 1: No insurance. The City "self insures" facilities. The rationale has always been that the premium vs. the risk doesn't support insuring.

Response 2: The only structure we cover with property insurance at the treatment plant is our office building. We also cover the contents of the office building, which includes our laboratory and all of our computer servers, and all shop (maintenance) equipment stored in other buildings at the treatment plant. We do not carry property insurance on any of our process buildings, tanks, etc. We are fully covered for liability, including automobiles, worker’s comp, directors insurance, fraud and theft.

Response 3: The City of Independence carries replacement cost policies. Earthquakes are covered but flood issues are decided on location basis. Given the geographic distribution and insurance law, not sure what risks could be pooled economically.

Response 4: The Metro District carries both earthquake (\$100M) and flood (\$50M) insurance. We also have chosen to carry no General Liability insurance as our maximum exposure under the Colorado Governmental Immunity Act for tort claims is \$150K per person and \$600K per accident.

Response 5: We are primarily self-insured as a municipal agency.

Response 6: NBC insure all of its facilities (plants, bldgs, interceptors, equipment) for just about everything.

Response 7: MMSD purchases property insurance for its water reclamation facilities but below-ground assets such as sewers are not insurable. MMSD does not carry insurance for natural disasters such as earthquake or flood. This coverage must be purchased separately from the normal property insurance markets. Coverage for flood damages, for example, is available through the National Flood Insurance

Program (NFIP) and excess flood carriers, but we have opted not to purchase at this time. MMSD currently insures its facilities through the Wisconsin Local Governmental Property Insurance Fund (LGPIF), with other Wisconsin municipalities and municipal agencies. In order to form a nation-wide pool, NACWA may want to investigate the feasibility of forming a homogeneous Captive for the purpose of insuring its members on a primary or excess basis.

Response 8: The West County Wastewater District (WCWD) serves a population of about 100,000 in Contra Costa County, California, just east of San Francisco. The plant design capacity is about 12 mgd, with an average dry weather flow of about 8 mgd.

The WCWD does not carry earthquake, flood or other natural disaster insurance on its collection system or treatment facilities. It found the cost to be prohibitively expensive when weighed against the risk. The WCWD has substantial capital reserves that can be accessed in the event of a catastrophic event.

The WCWD operates in an active earthquake zone. The Loma Prieta earthquake in 1989 measured between 6.9 and 7.1 depending upon the scale being used. Portions of the San Francisco Bay Bridge and Interstate Highway 80 Cypress Structure collapsed. The WCWD's treatment and collection facilities experienced little or no damage.

The WCWD's treatment plant is in a flood zone. It has flooded a few times over the past couple of decades, again with little or no damage.

Response 9: At Clean Water Services we use a mix of commercial insurance, self-insurance and loss prevention to protect the investment of our rate-payers. We carry commercial insurance on all District facilities which includes 4 wastewater treatment facilities, our administrative offices, our Field Operations group and the collection system including 43 lift stations and over 1200 miles of sanitary and storm water collection piping, over \$625,000,000 in values. The property insurance program provides coverage for natural disasters including earthquake, flood and wind. The earthquake and flood coverage has policy sub-limits which coverage prompts us to continue with mitigation efforts to keep our expected losses low so that the insurance layer will cover most or all of the damage of a significant earthquake or major flood. (We also carry terrorism coverage)

To help keep our costs down we use self-insured retentions (\$250,000 per occurrence) and fund a reserve to pay for the losses within the retention as well as some uninsured losses. We examine the potential savings of increasing the retention levels but so far the rate savings have not justified an increase in retention, but it has been getting closer as our values have increased. Between the loss prevention efforts to mitigate potential losses and the self-insured retentions we probably get the biggest bang for our buck at keeping the cost of the insurance under control while maintaining facilities that should fair reasonably well for the types of disaster we are likely to face.

Response 10: Per COA Risk Management the Watershed Management assets have short-term flood coverage of \$50M. No information on cost saving measures.

Response 11: We buy excess liability coverage for any negligent act. This would include negligence that caused issues from a water plant. Our retention is \$1,000,000 and we purchase \$10,000,000 in coverage.

We also purchase property coverage for the facilities. Our retention is \$500,000 for non-named windstorm, and 2% of the value of the structure for named windstorm with a \$10,000,000 aggregate cap. The limit of the insurance is \$100,000,000 for named windstorm and \$1,000,000,000 for non-named windstorm. Total County property values are approximately \$2,800,000,000.

Response 12: In response to your inquiry regarding whether clean water utilities typically have insurance on all their facilities, such as for natural disasters like earthquake damage or floods and if there are any other cost-saving measures in regards to insuring facilities that your members could share.

The Sanitation Districts of Los Angeles County (Districts) consist of 24 independent special districts serving about 5.7 million people in Los Angeles County. The service area covers approximately 820 square miles and encompass 78 cities and unincorporated territory within the county. The Districts were created to construct, operate, and "maintain facilities that collect, treat, recycle, and dispose of domestic and industrial wastewater." There are approximately 1,400 miles of main trunk sewers and 11 wastewater treatment plants that convey and treat half the wastewater in Los Angeles County. The Districts were also given the responsibility to provide for the management of collected solid waste, including disposal and transfer operations, and materials and energy recovery. The Districts operate three sanitary landfills, four landfill energy recovery facilities, two recycle centers, three materials recovery/transfer facilities, and participate in the operation of two refuse-to-energy facilities.

The Districts' insurance program includes standard fire insurance protecting all buildings, structures and major equipment, this coverage does not include perils from earthquake or flood. However, the Districts procure an all risk insurance policy that protects the energy facilities (wastewater and solid waste management), which includes coverage for earthquake, flood and business interruption.

In regards to cost-saving measures for insuring facilities, higher deductibles are a usual place to begin exploring, if your agency can afford to do so. A well run Health & Safety program with training and inspections can help keep your risks in check and can be a long term cost-saving feature. Risk management is company-wide and should be viewed so by all employees, from the workers up to and including top management. Health & Safety helps carry that message with continual training courses to the employees.

Response 13: Choosing insurance for water/wastewater facilities is part of the science of Risk Management. Risk Managers make financial decisions whether to purchase insurance based on whether the coverage is cost-effective. As a general rule, one should not buy insurance if one is able to bear the loss out of one's own funds. However, the possible loss from earthquake or flood damage is so great that relatively few public agencies desire to go without insurance. That said, in some parts of the county, the cost of insurance for flood or earthquake may be so great that it is not cost-effective.

A Risk Manager can describe hundreds of techniques to handle risk and insurance at water utilities. As one example, a utility might choose to insure certain facilities but not others, based on an analysis of perceived risk at each location. A utility might choose to put more of its funds into loss prevention instead of spending as much on insurance (which is a type of loss financing). As

one instance of loss prevention, a utility might choose to build new structures to a particular standard of seismic resistance so that most earthquakes would not cause major damage.

Response 14: I don't know that there is an industry accepted standard with respect to self-insuring vs. use of commercial insurance. In general, I think most utilities have some mixture — the better ones doing so consciously through a risk management program. In some cases, utilities may avail themselves of insurance pools for selected types of facilities to obtain better rates. In nearly all cases, an effective risk management program — complementing asset management programs — can help mitigate exposure and minimize damages.

As a general proposition, utilities should carry some reserves to enable them to fund necessary repairs and replacements on an emergency basis. WEF's MOP 27, Financing and Charges for Wastewater Systems offers some guidance on reserve levels in Chapter 3, excerpted below:

FINANCIAL RESERVES

The concept of establishing and maintaining financial reserves are often politically charged and yet can be one of the most important concepts in a well-run and financed utility. For an agency to have extra funds that are not identified for a particular use or for a well-identified reason suggests financial mismanagement or at least the possibility that the agency has overcollected for their needs and activities. Clearly defining the reasons for holding extra cash or maintaining financial capabilities and relating them directly to the operations and emergencies that may affect the utility are in keeping with good public policy.

Reserve levels may be established by legislative actions (such as Propositions 218 and 13 in California [Right to Vote on Taxes Act, 1996; Tax Limitation, 1978, respectively]), but more often are a result of sound financial planning or requirements established as a result of revenue bond issues.

The maintenance of reserves can be defined generally as the maintenance of cash or financial capabilities to meet unknown changes in the budgets and financial needs of a utility. These needs could arise from new laws and regulations, natural disasters, operating emergencies, financial losses in earning potential from idle cash, drop in economic conditions in the service area or the state, insurance losses, litigation, revenue collection process breakdowns, and operating emergencies in the service area. These needs may vary according to the types and designations of the funds collected or expenses required, thereby necessitating different policies for varying areas or funds of an agency's operation. By example, the utility may have special requirements for funds collected to pay for new, expanded facilities that are much different than the policies for replacement of equipment or to pay employee compensation and benefit responsibilities. In some cases, reserves may be restricted for specific uses or purposes and may only be accessed under predefined circumstances. In other cases, reserves may be unrestricted and available for a wide range of uses.

A well-managed and operated organization should take the time and effort to identify those conditions and situations that could have a substantial financial effect on the revenues and expenditures of the utility, whether through the agency's own actions or by actions of others that can happen quickly and without great warning. The utility should identify and determine the expected consequences of any action that would have a material effect on any of the operating revenues or expenses of the utility.

Experience of the Utility Management Committee of the Water Environment Federation

(WEF) has identified the following possible types and uses for reserves in utilities and enterprise operations (some of which may be duplicative but have different names in different regions):

- General operating reserves (including contingency reserves, reserves for claims and losses, reserves for bad debt allowances, and reserve for employee benefits, retirement, and medical funds). In general, these are established to meet general or specific operating needs. In some cases, they may be required as part of a utilities bond covenant. Typically, they are available for unforeseen fluctuations in expenses, revenues, or both; and they can be drawn on to supplement rate revenues if needed to meet operating expenses. A general operating reserve is often in the range of one to three months operating costs, depending on the instability or unpredictability of revenues and expenses. They can be established over periods of time from a year to several years. Because they are typically set at a percentage of costs, annual additions are relatively small after the initial funding
- Emergency capital reserves (including capital construction reserves, system replacement reserves, line replacement reserves, and disaster and emergency reserves) are established to cover unforeseen capital needs. These reserves are established to have available funds should a portion of the system be unexpectedly destroyed. Levels for these types of reserves can be set at a percentage of asset value (say 1%) or equal to the replacement cost of a critical or major portion of the facilities. Typically, these reserves are only used in an emergency situation such as a natural disaster (earthquake, tornado, hurricane, etc.) or perhaps a major sewer line collapse.
- Rate stabilization reserves. These are sometimes established where there may be wide fluctuations in revenues from season to season or year to year. The reserve is set at a level that can cover variations in cash flow. For utilities that set rates for multiyear periods, these reserves can be used to accumulate expected surplus revenues in the initial years and used for expected deficits in the final years.
- Bond covenant reserves. These are set up under provisions of a utility's bond resolutions, covenants, or ordinance. With revenue bond issues, they often include an O&M reserve (similar to the general operating reserve discussed above) and debt service reserves. The debt service reserve typically includes a year's worth of principal and interest or the maximum annual principal and interest. It is only used if there are insufficient revenues to make bond payments. The debt service reserve is often funded from the proceeds of a bond issue (as discussed in Chapter 5, a surety bond can sometimes be used in place of a debt service reserve).
- Insurance reserves. These may be established to pay for unforeseen claims or known future expenses. Rather than purchase commercial insurance, some utilities choose to self-insure some portions of their operations. In these cases, a self insurance reserve may be established to meet any claims. Another type of insurance reserve may relate to employee benefits such as deferred compensation or other benefit programs.

It is suggested that a utility review and evaluate the various means and methods that can have a materiality threshold based on potential impacts to key financial performance measures. These changes should be reviewed in light of the agency's ability to change and modify the means and methods it collects offsetting revenues or can change expenses. The utility should identify the drivers affecting the financial activities identified. It should determine the maximum length of time that it might have to operate without the revenue or expense and then determine the cumulative dollar value for this period of time. The utility should then consider its ability to fund the identified balances. Finally, the utility should develop a well-outlined policy statement for

consideration and adoption by the governing board. This last step creates a public debate on the advisability of the policies and allows for a good understanding by the public of the agency's identified needs.

Response 15: The Little Blue Valley Sewer District insures all above ground facilities for all types of disasters such as wind, hail, flood, vandalism, etc. We dropped our earthquake insurance on both above and below ground facilities and outfall sewers because we are not in an earthquake zone, although that insurance is pretty cheap. We also carry liability insurance on all facilities in case a visitor or even an unauthorized visitor should get hurt on site.

Response 16: Anchorage Water & Wastewater Utility is self-insured. We have liability insurance for claims that exceed \$1 million. We do not have floor or earthquake insurance. Earthquake insurance in Alaska is astronomically high.

Response 17: In response to the inquiry regarding insurance coverage for natural disasters, the Sewerage and Water Board of New Orleans has had a great deal of experience due to catastrophic effect of Hurricane Katrina. Virtually every facility owned and operated by this agency sustained some damage due to the storm. Many of those facilities are still undergoing repair. We have approximately 32 sewer pump stations that are scheduled for repair or complete rebuild. They are currently operating on temporary diesel powered pumps.

Pre-Katrina, we had coverage only on a select number of buildings. The coverage was for wind related damage. We did not carry flood insurance. That was problematic because (1) many of our facilities did flood and (2) recovery from FEMA in many cases was reduced by the lack of flood insurance. The existing policy was with a single company with a hefty risk retention. Following Katrina, we expanded the number of facilities covered. The industry, mindful of the Katrina experience, was limited and not very competitive with respect to cost. FEMA has required that agencies receiving FEMA funds must have coverage in place in order to be eligible for relief in the future.

In summary, while it is desirable for water utilities to have comprehensive insurance coverage for all of its facilities, the insurance marketplace will ultimately determine what coverage is available and for which facilities. Coverage for natural disasters is generally underwritten by the federal government and such coverage is subject to regulatory guidelines due to the nature of the disaster. Mitigation measures instituted by the utility may result in some reduction of premium. For example, elevation of electrical components within a pump station that had flooding.

Response 18: All of our facilities including clean water facilities are insured for replacement cost, earthquake and flood. Also, we carry business interruption and extra expense insurance on the two clean water facilities.

Here is a breakdown:

Property Limit/Business Interruption \$1,200,000,000
Earthquake \$ 250,000,000
Flood \$ 250,000,000 except \$100,000,000 flood zone A or B
Extra Expense \$ 50,000,000
Water Piping Outside Of a Facilities \$ 50,000,000
Deductible \$ 100,000

\$ 500,000 Flood Zone A or B
Excess Liability \$ 20,000,000
Retention \$ 2,000,000 per occurrence or wrongful act

Response 19: We are insured through the South Carolina State Reserve Fund. It is very reasonable and very comprehensive. Living in an area subject to flooding, high winds, and potential earthquakes will drive you to insurance.

Response 20: For your information, Upper Trinity Regional Water District carries insurance for all of its facilities at replacement cost through a statewide insurance pool. This has proven very effective. Depending upon the pools experienced losses during any given year; we have received up to 25% of the premium back as a refund or dividend. Also, we have insurance for terrorist acts (limited to \$15 mil) and business disruption set at \$10 mil.

Response 21: The Akron Public Utilities Bureau has insurance on its facilities that includes earthquake and flood coverage. About 6 years ago, we reduced the value of the sewer facilities we insured by approximately 25%. We accomplished this by identifying those that seemed to have an excessive amount of coverage (i.e. abandoned buildings, different use, etc). In addition, many of the facilities we identified were of masonry/concrete construction and were not as susceptible to fire(i.e. tanks that store wastewater). Our Finance Department brought in an industrial appraisal company who assigned a new replacement value to these facilities.

Response 22: Columbus Water Works maintains blanket building, personal property, machinery & equipment, earthquake and flood coverage for all our properties (+/- 90 sites). Our organization's risk management strategy strives to provide adequate coverage to all our insurable properties/equipment. The acknowledgment of risk and our risk advert strategy has paid dividends over the years; we recently experienced a catastrophic water storage tank failure that provided +/-3MM in coverage. Our commercial property insurance premium is +/- \$175,000 annually.