

WATER



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NUMBER 2

SUMMER 1995

The Magazine of the National Association of Water Companies

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The President's Message

by Jack E. McGregor

Like politics, religion and taxes, privatization is here to stay. It's a concept that is no longer considered politically incorrect. In fact, it's fast becoming politically incorrect not to at least consider privatizing certain public sector services. In the face of rising taxes and the need to cut services to meet budgets, public sentiment today is clearly on the side of smarter, leaner government.

The trend toward water and wastewater privatization, hardly a novel concept in Europe—from where our country took so many of its governing principles—has been gaining acceptance here in the U.S. over the last two decades, perhaps not so coincidentally with the adoption of the Safe Drinking Water Act and its implementing regulations. The burden on finding a way to fund and administer compliance with these regulations has fallen largely on state and local governments, as almost 85 percent of the U.S. population is served by a government-owned regional or municipal water system.

Two developments in particular have given added emphasis to the privatization movement. The first, in 1992, was President Bush's Executive Order 12803 regarding the disposition of municipal assets that had been acquired with federal financial assistance. Then in 1994, President Clinton's Executive Order 12893 established principles for the development and maintenance of federal infrastructure investments, which included a mandate to seek private-sector participation.

Against the backdrop of White House support, a number of other significant forces have been driving the politics of privatization. These include, in no particular order:

- A more favorable legislative and regulatory environment. Legislation enacted recently in New Jersey, for example, is designed to facilitate privatization of municipal water systems.
- The high cost of regulation.
- The increasingly complex technological and administrative procedures that must be followed to achieve regulatory compliance.
- An ever-aging infrastructure.
- The shift in public sentiment away from big government to smarter, leaner government.
- The trend toward regionalization of water and wastewater systems, and correspondingly away from the artificiality of town boundary lines established centuries ago.
- The recent privatization success stories of other municipalities, large and small.

Despite these seven powerful forces driving the engine of privatization, the road ahead is not without a number of significant obstacles. Among these are organized labor, which has largely resisted attempts at privatization in the past and undoubtedly has given the Clinton Administration some problems in insisting upon compliance with his Executive Order regarding privatization, and the paucity of established successes over a long-time period.



Several familiar provisions of federal law have significant impact on the water supply industry, including the CIAC tax, SRFs, tax-exempt bond financing, and FmHA financial-aid programs. The net impact of these provisions, only one of which treats us roughly equally with municipals while three hurt us, weighs heavily against investor-owned water suppliers. The scales of federal justice are badly out of balance.

Ironically, funded, as opposed to unfunded, mandates may slow the movement toward privatization. Now that Congress has enacted into law language that requires the federal funding for government to provide regulations costing over \$50 million, municipalities may detect a reprieve from environmental mandates and be less inclined to sell assets outright. Contract management should remain a viable alternative however. Ideally, any legislation authorizing state revolving loan funds should be written so as to make funding available only if the municipality has explored all other cost-effective options, including privatization.

These issues notwithstanding, privatization is a trend that is taking hold. The American people, overgoverned, overtaxed and under-served, will continue to bring pressure to bear on government waste and inefficiency, and privatization is a proven antidote to both. Public water supply and wastewater services—driven by market forces such as consolidation, the high cost of compliance and modernization and inadequate resources at the municipal level—are two of the most logical service segments to benefit from this trend.

To quote from Vice President Gore's National Performance Review: "Governments have begun to contract competitively; school districts have begun to give their customers a choice; public managers have begun to ask what their customers want. This trend will not be reversed."

Clearly, the privatization genie is out of the bottle, and all of us—as citizens, businessmen and customers—can only benefit in the long run. That should be our idea of being politically correct. *

The Water Companies Came Marchin' In . . .



NAWC will celebrate its centennial this year at the Inter Continental Hotel in New Orleans, October 29 through November 2. Gathering down in Dixieland to honor "100 Years of Drinking Water Achievement," we will reflect on the past 100 years of the industry and focus on where we want to be in the future. Plan to take a comprehensive look at the changes that the water industry is making, as well as enjoy all that the unique city of New Orleans has to offer.

Located in the heart of the city, the Hotel Inter Continental is just a short distance from the historic French Quarter and a few minutes from the Riverwalk and the French Market. With its traditional Creole cuisine, its unique blend of sights and sound and endless southern hospitality, the Crescent City is the perfect location for the 99th Annual NAWC conference.

Sunday

To accommodate early arrivals, conference registration will be open from Noon until 5:00PM on Saturday. On Sunday, registration will be open from 8:00AM to 5:00PM.

On Sunday morning NAWC will hold its Golf Tournament at Bayou Barriere, a public course owned by Senior Touring Pro Jim Colbert. A continental breakfast will be served prior to tee time.

This year's NAWC Tennis Tournament will also be held on Sunday, on the indoor courts at the Hilton Rivercenter Racquet and Health Club, part of the Sheraton New Orleans Hotel.

Two tours will also be offered on Sunday. "New Orleans a la Carte," a tour of New Orleans' famous sites, will be offered in the morning and again on Sunday afternoon. The tour will take participants through the city; beginning in the French Quarter with a stop at Jackson Square, one of the most photographed spots in North America, and where the city was founded. The nearby historic French Market combines an extraordinary blend of history, architecture, food and shopping. Once used as a trading post by the



Hotel Inter Continental

Choctaw Indians, it is now a collection of specialized markets in the French Quarter with outdoor cafes and unique shops nestled in between them. The famous Farmers' Market sells fresh tomatoes, okra, melons, garlic and sweet potatoes to local chefs. Following the French Market, the tour will stop on Esplanade Avenue. Elegant homes with lace balconies line this tree shaded street that once was the most fashionable promenade of New Orleans. The tour will also stop at an above-ground cemetery, a unique way to bury the dead that is necessitated by New Orleans' high water table that makes it impossible for below ground burials. Passing the beautiful City Park where duels were once fought, the tour will continue along Lake Pontchartrain and past America's second oldest yacht club. Returning to the heart of the city, the tour will continue down St. Charles Avenue alongside the city's historic streetcars, the oldest street railway system in the country. Before returning, the tour will circle the Superdome, the proud home of the New Orleans Saints.

"Magnificent Mansions of the Garden Dis-

trict" will also be offered on Sunday. This tour through New Orleans' garden district turns back time to the halcyon days of the mid-nineteenth century. Mansions with leaded glass doors, balconies, and stately columns and surrounded by intricate iron fences sit amidst lush foliage and gardens with magnolias, oak trees, azaleas, camellias, and fragrant sweet olive and jasmine. These prestigious residences are home to many prominent New Orleanians, many of whom have reigned as kings and queens of Mardi Gras. A tour through two of these private mansions has been specially arranged. The tour will continue with a stop at Lafayette Cemetery, a beautiful example of the house-like tombs unique to New Orleans' burial grounds. Reboarding the motorcoach, the tour will continue down St. Charles Avenue past Tulane and Loyola Universities and through unique shopping areas before returning home.

Sunday evening's "Taste of New Orleans" reception will feature a variety of colloquial cuisine including gumbo, jambalaya, red beans and rice, crawfish etouffee and many other New Orleans delicacies accompanied by New Orleans style entertainment, all being made possible by some generous sponsors:

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Monday

The Conference will get started with a recognition of NAWC's 100th Anniversary. Keith Harrell, a former executive with IBM and president of Harrell & Associates in Atlanta, will discuss the importance of a positive attitude in the workplace to improve professional and personal potential.

Commissioner Bob Anderson of the Montana Public Service Commission, and President of the National Association of Regulatory Utility Commissioners (NARUC) and Commissioner Charles Hughes of the North Carolina Utilities Commission and Chair of NARUC's Water Committee will speak on the future of commissions.

Concluding with a presentation by Carol Browner, Administrator of the U.S. Environmental Protection Agency, we will take a look at the perspective of the Administration of the EPA.

Chapter luncheons will be held on Monday, as well as the Spouse Luncheon, "Plantation Homes of the Southern Gentry." The luncheon will feature a visit to two privately-owned plantation homes, Houmas House Plantation and Nottoway Plantation. Nestled in a bend of the river, Houmas House is still a frequent stop for steamboats cruising their way up-river as in bygone days when Houmas House was the prime producer of sugar cane in America. Nottoway Plantation, built in 1865, covers 65,000 square feet making it the largest antebellum home in the South, and is one of the finest restorations in the area. A

Southern-style lunch will be served at one of the plantations.

Following Chapter luncheons, Dr. John D. Graham, Director of the Harvard Center for Risk Analysis, will discuss the public perception of risk, the relative risk from drinking water versus other health risks and the cost/benefit comparison.

Following Dr. Graham, there will be three speakers giving the perception of their various organizations on the water industry. The afternoon will conclude with a panel entitled "How Can the Water Utility Improve its Image?"

Tuesday

Tuesday morning will begin with a Regulator's Panel, with Commissioners from various states on the panel. Paul Foran, former chairman of NARUC's Water Committee, will serve as moderator of the panel.

Following the Regulators' Panel, a representative of ENTERGY, an electric utility based in New Orleans, will talk about the changes in the electric industry and their potential impact on the water utility industry. John Barrington of The Wellsley Group, Inc., will discuss "transitions and opportunities." Tuesday sessions will conclude with a panel discussion on re-engineering the water industry.

Tuesday afternoon "New Orleans a la Carte" and "Magnificent Mansions of the Garden District" will be available for those who missed them on Sunday, as well as a "Mysteries of the Swamp" tour. The tour will provide the fascinating story of the Cajun people and their heritage as participants cruise through the swamplands of Southern Louisiana. Alligators, snakes, birds, and matrias all dwell in these marshes as well as endless vegetation including wild iris, cattails, and mallow. The tour will begin with lunch at the Point at Algiers Landing, an unusual restaurant with an antique and intimate atmosphere. The restaurant is situated at the sharpest bend in the river and has a perfect view of one of America's busiest ports in action. Following lunch, participants will go out on the swampland and be introduced to the Cajun French-speaking immigrants and their way of life that in some ways has scarcely changed since they came from Nova Scotia almost two hundred years ago.

Wednesday

On Wednesday, the day will begin with "Breakfast at Brennan's," where you will dine

as the French Aristocrats of early New Orleans did. No trip to New Orleans would be complete without a visit to the world-famous Brennan's for breakfast, which has long been heralded as an incomparable, one-of-a-kind experience.

After breakfast, Jim Manwaring, Executive Director of American Water Works Association Research Foundation (AWWARF) will begin the morning with a discussion about AWWARF and what it provides for NAWC members. Then, "The Washington Scene" will be discussed by a speaker familiar with the political climate in Washington, which will be followed by a panel discussion on the "D.C. Objectives of the Water Utility Industry." The Wednesday morning session will conclude with a discussion of "Shareholder Value—The Market's Perception."

A "Creole Cooking Demonstration" will be held on Wednesday afternoon, where participants will learn how to prepare the cuisine that has made New Orleans famous. The menu will consist of gumbo, jambalaya, bread pudding, pralines and iced tea or Dixie Beer. Learn the secrets of Cajun cooking as you are entertained with the history and origin of Creole recipes.

Wednesday afternoon will consist of concurrent seminars given by various NAWC Committees. The Customer Service Committee Seminar entitled "How Important is Customer Service to Your Company?" will be held at the same time as the Rates and Revenues Committee Seminar entitled "Main Replacement and Ratemaking Concepts," and the Information Technology Seminar and Public Information Committee Seminar, "Staying Cool in Hot Water," will follow.

Wednesday evening will be a New Orleans-style Halloween Party. An elegant dinner spiced up with New Orleans-style entertainment will follow drinks and costume admiration.

Transportation

American Airlines is the official airline for this Conference. Through American, savings are available for Conference participants flying into the New Orleans Moisant Airport. To check on rates, or to make reservations, call American at 1-800-433-1790 and refer to star file number S7705AB.

Many of the attractions of New Orleans are a short walk or cab ride from the Inter Continental. For those who would like to have a car, Hertz has been selected as the Conference rental car provider. ♦



Registration Form

NATIONAL ASSOCIATION OF WATER COMPANIES 99th Annual Conference

New Orleans, LA
Sunday, October 29–Thursday, November 2

FOR OFFICE USE

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AMOUNT _____

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REGISTRATION

ADVANCE REGISTRATION ENDS OCTOBER 6

Enclose a check made payable to NAWC for full amount of ALL registration fees. A \$25 fee will be added to all registrations received after October 6. Full refunds will be made only on cancellations received in writing by October 19. A \$25 cancellation fee will be deducted from each refund.

EVENT	NO.	AMOUNT	TOTAL	EVENT	NO.	AMOUNT	TOTAL
Business Program Registration (Employees of Active Member Companies)		\$300.00 each		New Orleans a la Carte (please circle time) (Sunday, 10:00AM–1:00PM) (Sunday, 1:00PM–4:00PM) (Tuesday, 1:30PM–4:30PM)		\$20.00 each	
Associate Member Registration Business Program Registration		\$400.00 each		Magnificent Mansions of the Garden District (Please circle time) (Sunday, 2:00PM–5:00PM) (Tuesday, 1:30PM–4:30PM)		\$22.00 each	
Non-Member Registration Business Program Registration		\$500.00 each		Spouse Tour: Plantation Homes of the Southern Gentry (Monday, 10:00AM–4:30PM)		\$60.00 each	
Family Member Registration (spouse/children)		\$85.00 each		Mysteries of the Swamp (lunch incl.) (Tuesday, 1:00PM–4:30PM)		\$48.00 each	
Golf Tournament (Sunday, 7:00AM) Player's Name(s) _____		\$95.00 each		Breakfast at Brennan's (Wednesday, 9:30AM–11:30AM)		\$48.00 each	
Tennis Tournament (Sunday, 1:00PM–4:00PM) Player's Name(s) _____		\$40.00 each		Creole Cooking Demonstration & Lunch (Wednesday, 12:30PM–3:00PM)		\$40.00 each	
Sunday: Taste of New Orleans Reception (Sunday, 6:30PM–9:00PM) (no charge, but all participants must be signed up)		no charge		Reception and Dinner Dance (Wednesday, 6:30PM–11:00PM)		\$80.00 each	
Chapter Lunch (Monday, Noon)		\$27.00 each		TOTAL AMOUNT ENCLOSED \$ _____			

ACKNOWLEDGEMENT AND RECEIPT SHOULD BE SENT TO:

Name _____ Phone () _____

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Hotel Reservations should be completed and sent directly to New Orleans.

SEMINARS

Please check the seminars you plan to attend.

Wednesday, 1:45PM

Customer Service Committee Seminar _____
Rates and Revenues Committee Seminar _____

Wednesday, 3:15PM

Public Information Committee Seminar _____
Information Technology Seminar _____

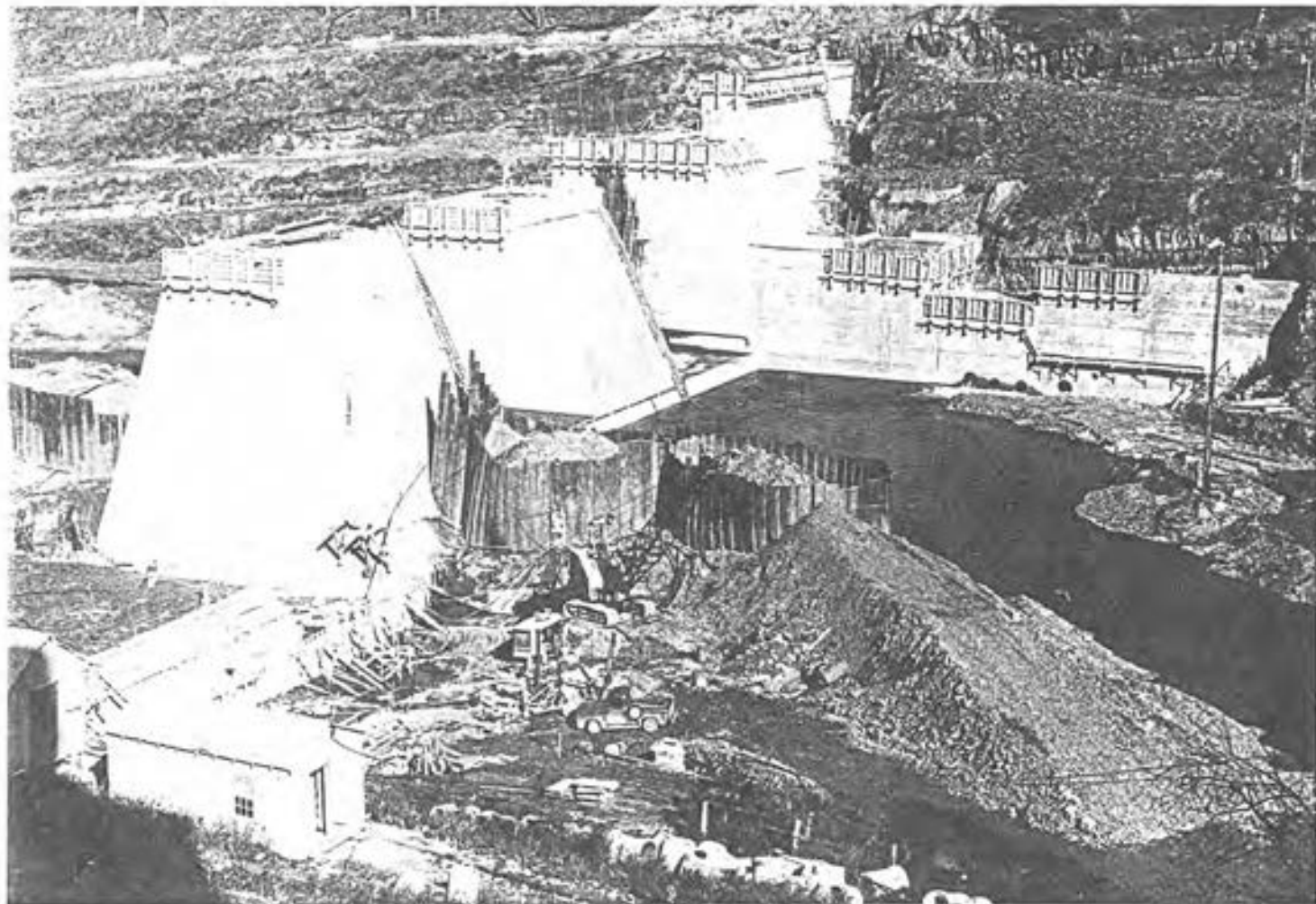
Thursday, 8:30AM

Small Companies Committee Seminar _____

NAWC History

1946-1970

by T. Ward Welsh



Construction of the Green Lane Reservoir
(Philadelphia Suburban Water Co.)

This is the third part of NAWC's history, prepared in conjunction with NAWC's Centennial. The next issue of *WATER* will feature part four in the series.



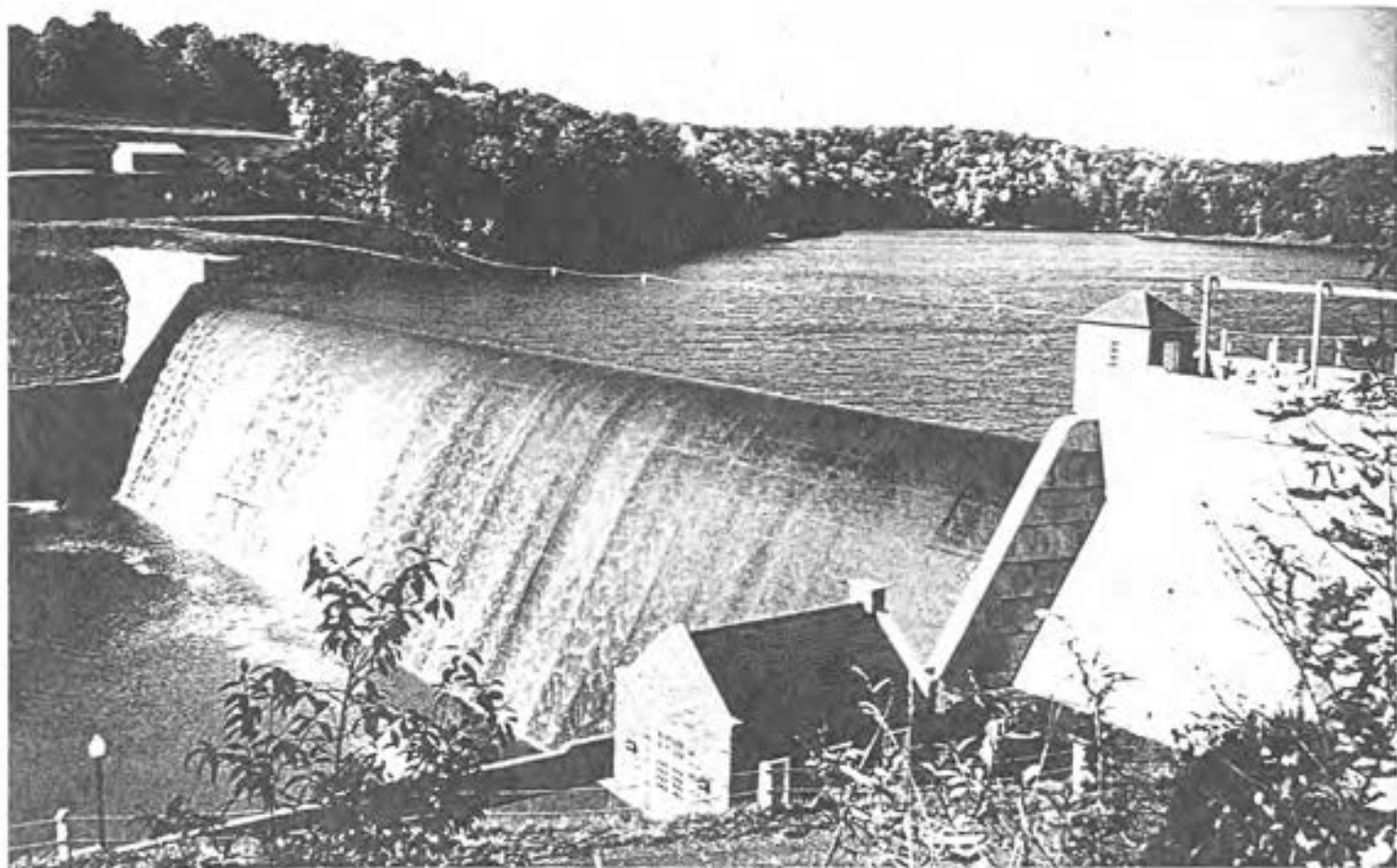
new world was dawning when the Pennsylvania Water Works Association convened its Golden Anniversary meeting in 1946. The war was over; Hitler and Mussolini, both dead. The United Nations had held its first meeting in London and had its eye on a site for a permanent headquarters in New York.

Xerography, a new way to print, had just been invented. And engineers at the University of Pennsylvania were fooling around with a

secret room-sized "numerical integrator," the first all-electronic computer.

The 161 PWWA members who gathered at Atlantic City's Traymore Hotel were looking forward to upgrading and expanding their water systems now that the six-year wartime building hiatus was over. Indeed, they were back in Atlantic City, their old stomping ground, for the first time since 1941, having been displaced by the Army and the Air Force during the war years.

(continued next page)



The Green Lane Reservoir, completed in 1956.

They were optimistic, but uneasy. War-time inflation, which they had expected to moderate after the armistice, was still rampant, putting extreme pressure on the bottom line. There was real anxiety about the spread of Russian communism. Many saw every new government program or regulation—and there were plenty of them under President Harry Truman—as ominous encroachment. Conference speakers warned that the American free-enterprise system was under siege and that businessmen had better man the barricades.

Murdock Sets the Tone

In his address, John Murdock, just turned 60 and in his 17th year as president of the PWWA, said that 50 years had not been sufficient time to resolve many of the issues Pennsylvania water suppliers faced when they formed the Association. But, he added, there were new problems now, among them, inflation, labor unrest and "the protection of our economic system from Communist troublemakers," and it was going to take some "original thinking" to deal with them.

Dr. Harold Moulton, president of the Brookings Institute, warned the conference that the most serious threat to American capitalism was not from abroad but from the tendency of economic power and wealth to concentrate in the hands of the few. Business and government leaders had better work to preserve competition, create jobs, disperse income, and safeguard the weak and the distressed, he said, or communism would have rich soil on which to grow.

Another speaker concluded that the most important technical advances in the industry since 1895 had been (1) the introduction of chlorine as a disinfectant, (2) the development of rapid sand filters and (3) the use of other additives—lime, soda ash, carbon, copper sulfate—to improve water quality.

David Dunlap, a lawyer and utility consultant who would later serve as secretary of the Association, pointed out that six more Pennsylvania water suppliers, which served some 43,000 customers, had been sold to public authorities or municipalities in 1946, saving their customers

\$275,000 in federal taxes. "If governments are going to run businesses," Dunlap said, "they should pay the same taxes as the rest of us."

Enter Jim MacIntosh

W. James "Jim" MacIntosh, a Philadelphia lawyer who was counsel to the Philadelphia Suburban Water Company, took issue at the meeting with the Pennsylvania PUC's allegiance to original cost accounting. (MacIntosh was about to get together with Northeastern Water Company's John Ware, who was seeking advice on a strategy by which he could gain control of American Water Works & Electric Company's water properties. They were about to be spun off under the provisions of the Public Utility Holding Company Act. As a business historian later wrote, "it was like a Triple A ballplayer deciding he wanted to start in the major leagues." Ware, who had just leveraged his \$5 million utility holdings to buy Northeastern for \$21 million, was now looking at a group of water companies worth, perhaps, twice that. MacIntosh helped him

pull it off and became a director of the new American Water Works and a lifelong confidant of Ware.

In 1947, the U.S. population was about 140 million, twice what it was when the Association was founded (and just over half what it is today). A million World War II veterans were attending college on the GI Bill. Congress passed the Taft Hartley Act, restricting the rights of labor unions. President Truman articulated the "Truman Doctrine," the nation's first attempt to contain communism. And Jackie Robinson became the first black player in major league baseball.

The Association meeting that year was another homecoming of sorts. The group, 120 strong, convened at the Haddon Hall Hotel after being away five years. Murdock called it "a long sojourn in exile." Talk at the time was mostly about the growing demand for water as builders mass produced homes in the suburbs—the Levittowns—for ex-GIs and their growing families. Rates just weren't keeping up with the costs of expanding systems. And employers were smarting under new rulings that they had to pay workers for time spent getting to a work site and overtime after 40 hours.

Focus on Small Companies

Roger McShea of the Pennsylvania PUC told the conference there were 470 investor-owned water companies in the state, and about half of them had revenues of under \$5,000 a year. He urged larger companies to find a way to assist or acquire struggling small companies, whose troubles, he said, reflected badly on the entire industry. Dr. E. Wight Bakke, a professor of economics at Yale, spoke that year on building a labor-management team. A widely respected labor relations specialist and a convincing speaker, Bakke would be a familiar figure at conferences for the next 15 years.

Association expenses in 1947 (\$11,000, including \$6,100 for salaries) exceeded income for the second straight year. This prompted Murdock to cut the budget for the annual conference from \$3,000 to \$1,200 in 1948 to get the organization back in the black.

The pressure of inflation was sharp enough in 1948 to induce 34 Pennsylvania water companies to file for rate relief; this was four times the number that had

filed the previous year. Still, as one speaker noted at the conference, it was only about 7% of the state's investor-owned suppliers. Most were making do despite rising costs.

Stream pollution returned to the agenda that year. Pennsylvania's deputy attorney general, Francis J. Gafford, pointed out that the state was second only to New York in density of population and industry and its rivers and streams were in extreme jeopardy. "We've got to destroy pollution before it destroys us," Gafford said. He also said better training was needed for sewer and waterworks operators.

Training Need Acknowledged

Murdock acknowledged that water plant operators needed better training, not only in technical matters, but in management. "We still have people who believe it's possible to drive men," he said, "and they're getting very poor results."

Lawyer Jim MacIntosh, who had just returned from a trip to Europe, decried the splintered political situation there. He said that Europeans, far from appreciating the U.S.' contribution to the defeat of Germany, were blaming Washington for letting the Communists seize eastern Europe and were constantly bickering about farmers', workers' and shop owners' rights.

"We can't let that sort of thing happen here," MacIntosh said. "We've got to get unions in the Republican Party and capitalists in the Democratic Party. We've got to think in terms of the nation, not special interests." He drew loud applause.

Pittsburgh attorney Joe Beck, who would speak on national affairs at many conferences in the 1950s, seconded MacIntosh's remarks. "We have to look for the most good for the most people in solving our problems and disputes," he said, "and avoid splitting the nation by class."

The following year, 1949, as the cold war heated up, the North Atlantic Treaty Organization was born. Chiang Kai-Shek and his army withdrew from mainland China to Formosa in the face of superior communist forces and the Berlin airlift ended after 277,000 flights carrying food, clothing and medical supplies into the democratic island in communist East Germany.

E. R. Hannum Is Remembered

About 130 people showed up for the conference that year at the Claridge Hotel in Atlantic City. They paused during the opening session to pay their respects to Erle R. Hannum, of the Richland Water Company, who had died. Hannum had been chairman of the Association's executive committee and both secretary and treasurer of the group. A young American Water Works Service Company accountant, William A. Kufs, succeeded him as secretary-treasurer.

Col. William Rockwell, of Rockwell Manufacturing, told the conference that utility equipment manufacturers had benefited immeasurably from the rigors of wartime production. Synthetic rubber had replaced natural rubber in all seals, he said, and was proving to be a versatile and economical material. A new initiative by AWWA and manufacturers to standardize hardware would benefit utilities and their customers, Rockwell added.

A McGraw Hill editor predicted a continuation of the post-war construction boom "if we can avoid getting tangled up in strikes." And E. Wight Bakke, of Yale, was back, urging attendees to find a way to give their workers "a voice in the company," rather than building walls that solidified union power and intransigence.

Rate Case Workshop

About half the meeting time in 1949 was devoted to a long workshop/panel discussion on the preparation and presentation of rate cases. Five engineers, a lawyer and a utility manager, Jack Barr, financial vice president of American Water Works Service Company, made up the panel. Barr would play a growing leadership role in the Association in the 1950s and '60s, emerging as chairman of the board when it went national in 1967.

After five years of peace, the United States went to war again in 1950. North Korean Communist forces invaded South Korea in June and within a few days, President Truman ordered U.S. troops to join a United Nations police action there.

Pennsylvania Water Works Association President John Murdock, in his opening remarks at the October conference, expressed concern about the U.S. involvement in the hostilities and the possibility that Red China might enter the war.

(continued next page)



Robert W. Kean, Jr.

(Within three weeks of his talk, Peking did just that.) Murdock also was troubled by the growing Communist Party presence "at home" and suggested it was time for members to dust off the plant security programs they had implemented during World War II.

Frederick Knight, a Philadelphia lawyer, reviewed developments in collective bargaining at the 1950 meeting, citing the growing demand for pension plans for workers.

'Outsiders' Join Meeting

More than 200 people attended the Association's 1951 conference, including 55 guests from the New Jersey section of the American Water Works Association. Among the New Jersey contingent were two young officers of Elizabethtown Water Company each of whom would one day head the Association: 30-year-old Robert W. Kean, Jr., who would succeed John Murdock as president in 1967, and Kean's boyhood friend and Princeton roommate, Henry S. Patterson, who would become NAWC president in 1979-80.

Murdock told the gathering in his opening address that the nation's water supply business was "as strong as it has ever been, despite predictions of calamity due to social, economic and political trends." But he said the nation was "on a knife edge between world peace and World War III."

E. H. "Spike" Aldrich, vice president and chief engineer with American Water, described the company's experience with an innovative filter plant he had designed

for Alexandria, Virginia. The circular plant was comprised of a 24-foot-diameter chemical mixing basin surrounded by a 76-foot settling basin which, in turn, was surrounded by an 84-foot donut-shaped filter bed. The fully-automated plant was more efficient, cheaper to build and cheaper to run than conventional ones, Aldrich said. American had three others under construction in Pittsburgh and Greensburg, Pennsylvania, and in Chattanooga, Tennessee. By 1961, when he retired, the company would have a dozen "Aldrich units" on line around the country.

Fluoridation Catches On

Martin Flentje, a sanitary engineer with American, reported on progress with fluoridation. More than 150 communities in the U.S. were fluoridating in 1951 and another 300 were preparing to do so. (Newburg, New York, where it was first tried, had reported a 49% reduction in dental cavities after five years of fluoridating.) Flentje said the treatment probably would become universal unless a way could be found to target its application by adding it to milk, chewing gum or toothpaste.

Joseph Beck, the Pittsburgh lawyer, noted the failure of socialism in Russia and England, where production was lagging dramatically. He said he couldn't see how anyone could pin his hopes on such a system, but advised that Americans be on guard for any movement in that direction. The Labor Relations Committee brought

to the 1951 meeting quotes on a medical plan for member companies' employees. It provided up to \$8 a day for hospitalization and \$200 for major surgery.

In 1952, the Pennsylvania Water Works Association moved its headquarters from the old Telegraph Building in Harrisburg to the State Theater Building. The lease hadn't expired on the old office so it was made available to members who visited the State capital on business. The annual meeting that year was at Atlantic City's Chalfonte Hotel, where it would stay until 1965.

'Face Facts,' Murdock Urges

Murdock told the 133 attendees that operating water companies wasn't getting any easier. Things never had "normalized" after World War II, he said. All businesses were still feeling the effects of inflation, but most didn't have to contend with "the reluctance of the courts and the regulatory commissions to discard obsolete precedents and face the facts of economic life," Murdock said.

"The pressures on our members are greater than ever: growing service areas; increased demand, especially in the summer; inadequate storage and treatment capacity. You need imagination and vision to sell needed expansion projects," Murdock told his colleagues, "and courage to take the financial risks they require."

The president of Fidelity-Philadelphia Trust Company said at that meeting that the real threat to the American economy was not a direct government takeover of companies, as was happening abroad, but (1) government's controlling business by regulating and subsidizing power, farming and production, and (2) inflation. The value of the dollar had dropped by 52% since 1939, he said. And the public debt had burgeoned to \$5,700 for every American family. "The government is just too big," he said.

But Dr. E. Wight Bakke, of Yale, the Association's labor relations guru, told members not to worry just because they weren't getting their way in everything. The beauty of the American system, Bakke said, is that "the great masses of working people have a say in public policy, too, and that accounts for some of the things—social programs, regulation—that are going on today."

'A Lot to Be Criticized'

"Just because people criticize capitalism doesn't mean they are socialists," Bakke said. "There's a lot to be criticized in our system."

Harold A. Scragg, chairman of the Pennsylvania PUC, told Association members in 1952 that their opponents were "more committed and more impassioned than they" and that they had better get to work convincing consumers that they provide a valuable service. Many people want government to manage your companies, not regulate them, Scragg said.

Pittsburgh lawyer Joe Beck, in his 34th address to the Association in as many years, told the group that patriots like Sen. Joseph McCarthy, of Wisconsin, had the Communists "on the run." About two weeks after the meeting, American voters put two other Cold War banner-carriers, Dwight D. Eisenhower and Richard M. Nixon, at the nation's helm. The White House was back in Republican hands for the first time in 19 years. (This also was the year the Murchison brothers, Clint and John, of Texas, purchased a controlling interest in the Indianapolis Water Company from the Geist estate. They brought Howard "Scotty" Morse, who had managed the company in the 1930s and '40s, out of retirement to be president.)

Korean War Ends

The following summer, a treaty was signed under which Chinese Communist troops withdrew from South Korea and the three-year war there ended. The U.S. death toll: 54,000. The year 1953 also would be remembered for two "firsts." Doctors linked cigarettes and lung cancer. And America executed its first Cold War spies, Julius and Ethel Rosenberg.

The PWWA meeting that year drew 115 members from 61 water companies and 31 manufacturers' representatives. John Murdock, in his 25th presidential remarks, scoffed at a newspaper editorial that suggested that "just about anyone" could manage a water company. Not so, he said. Running a water company required a man of exceptional personal integrity and professional competence, someone who could plan well enough to avoid emergencies, but be ready to deal with one if it arose. He had to be good at finance to keep the operation solvent. He had to be a man who could listen to and

learn from his customers and who would grow with experience.

"Oh, no," Murdock said, "not just anyone can manage a water company." (Is it any wonder they loved him?)

PR Returns

Public relations was back on the agenda in 1953, probably because of the dressing down the Pennsylvania PUC chairman delivered at the previous meeting. Ralph Cooney, a PR agency executive, described a three-year communications effort by a New York water utility to fend off a municipal takeover. The campaign entailed 150 different print and radio commercials conveying 234 individual messages. Cooney gave listeners the details on the execution of the successful program.

A panel of five speakers that year bemoaned the ongoing problem of stream pollution—particularly mine drainage and industrial waste—and the State's seeming inability to do anything about it. Kenneth Gemmill, a Philadelphia lawyer who had been part of a U.S. Treasury Department team charged with overhauling the Internal Revenue Service, ended the conference on a bright note. He said the reform "should put more money in Americans' pockets."

A few months after the meeting—and less than a year after the cease-fire in Korea, President Eisenhower dispatched American advisors to South Vietnam, where the Communist Viet Cong had defeated the French at Dienbienphu. The U.S. role would remain an advisory one . . . for the next six years.

Back in 'the Black'

The number of attendees at the Association's 1954 conference dropped off a bit, to 108. But a record 43 manufacturers' reps were on hand, including four people from Neptune Meter Company and U.S. Pipe and three from the Mueller Company. The Association was healthy again financially, boasting a net worth of \$22,000 and a payroll of \$6,600. It terminated the lease on the old Harrisburg office in the Telegraph Building.

Murdock's message that year was that water companies ought to stop focusing on how low their rates were and start touting their excellent service. We talk about our low rates so much, he said, that regulators figure we're proud of them and want

to keep them that way. The remarks evolved as his "Too Cheap Water" talk, which was to be a hallmark of his presidency. Also, he said, the industry has to start grooming leaders who will approach regulators, "not like whipped puppies," but with energy, enthusiasm, pride and imagination, leaders who will "stay ahead of customer demand, instead of always trying to catch up with it."

Gannett Fleming engineer Charles Kressler told the group water companies would never get credit for being efficient until they came up with a way to prove they were. While you always claim efficiency, he said, "you can't prove it." Kressler said managers should be more aggressive about looking for ideas in municipal operations and other utilities. Then you've got to set up some kind of a "yardstick" to rate efficiency, he said. "Until you do, the regulators aren't going to take your claims seriously."

'Costs Won't Come Down'

Abel Wolman, of Johns Hopkins University, moderating a panel discussion on the cost of service, said the industry had better stop waiting for costs to come down "because it's never going to happen." In fact, he said, water service was cheaper in 1954, relatively speaking, than it had been in the 1930s.

Joe Beck, providing, as he usually did, his own slant on national affairs, said he was concerned that the nation was losing its virility. He decried, "the alarming number of boys in the U.S. found unfit for military service," was more, he said, than in any other country. Beck said it was all the politicians' fault: they "just tell people what they want to hear and promise security from the cradle to the grave." The most serious threat to the U.S., he said, "is not other nations' ships or guns, but the decline in our virility."

The Association polled its members in 1955 on whether they wanted to continue meeting in Atlantic City or try somewhere else. The response was light, but only one member was tired of the seashore . . . and that was before casinos.

'Just Like Jesus'

For the first time in his 26 years as president, John Murdock did not open the meeting that year. He had another com-
(continued next page)



Abel Wolman

mitment, so he asked Joe Beck to set the stage for the conference. He, in return, would sum up at the end. Beck, who found many of his themes in his reading, drew on the spiritual guide, "The Imitation of Christ," and a history of the New York City water department, concluding that "we in the water business are here to serve, just like Jesus."

American Water Works engineer "Spike" Aldrich reported on developments in the ongoing controversy between Philadelphia and New York over New York's diversion rights in the upper Delaware River watershed. A regional commission had been formed to arbitrate the dispute but it eventually ended up in the courts . . . and would be a point of contention for the next 40 years.

Murdock's son, Converse, a lawyer with Ken Gemmill's Philadelphia firm, Dechert, Price & Rhoads, spoke at the 1955 meeting about the "opportunities and pitfalls" in employee pension plans. He warned against selecting a plan for its tax benefits, saying it might prove to be a Pyrrhic victory over the IRS. Rather, he said, pick a plan that will help attract and retain competent employees, "then see that it doesn't have any tax pitfalls."

Floods Hit Pennsylvania

John Murdock, in his closing remarks,

paid tribute to the companies that had "kept the water running" during severe floods in northeastern Pennsylvania that year. And he praised a new employee training program introduced by Philadelphia Suburban Water Company. He said it could be a model for the industry. Then he ended with an appeal to the PUC to be "more reasonable." Just because rates aren't confiscatory, doesn't mean they're fair, Murdock said.

The Cold War heated up a bit in 1956. Soviet troops entered Hungary, sending thousands of refugees fleeing, many to the United States. And the Cuban socialist rebel Fidel Castro returned to his homeland with a small guerrilla force to take on dictator Fulgencio Batista.

John Murdock retired from American Water Works Company that year at age 70, but volunteered to stay on as Association president as long as they'd have him. David Dunlap, a Harrisburg lawyer who had been active in monitoring the legislature and the courts, became Association secretary. The Pennsylvania legislature, in a marathon session that year, had increased corporate taxes and stirred up a fire storm. Big companies like Westinghouse and the Pennsylvania Railroad were talking about moving to other states. It could mean big trouble for Pennsylvania's utilities, Dunlap said.

Fun with Fluoride

On a light note, a fluoridation bill before the legislature had inspired a poem, which was printed in a state newspaper. Dunlap shared it with the group:

*"Aye! Pass the watered scotch around,
Though it be fluoridated;
What matter if such odious stuff
Is contraindicated?
Let kidneys fail and livers shrink
And marrow split and dry.
We'll have the soundest sets of teeth
To smile with as we die."*

The conference called a special session at the 1956 meeting to honor the memory of Nathan B. Jacobs, president and chief engineer of Morris Knowles, Inc., and as Association vice president for 23 years. Jacobs was eulogized by Joe Beck as "one of nature's noblemen." Murdock noted that Jacobs had been stricken while in Harrisburg on Association business, "so his last professional work was for our benefit."

A Pennsylvania Superior Court ruled that year that a utility's rate of return should be the same as the cost of money. Association Secretary Dunlap expressed frustration that utilities hadn't been able to convince regulators or the courts that "this isn't realistic." There was some good news from the government, however. Liberalized depreciation rules in the Internal Revenue Code were allowing businesses to book greater depreciation in the early life of an asset, thus permitting quicker recovery of the investment.

'Old Days' Recalled

Murdock, noting that it was the organization's 60th annual meeting (their having skipped 1944), cited the contrast "from the old days," when they met behind closed doors and posted guards to see that no outsiders got in. There were no regulators at the early meetings, no guests from state departments, he said.

"The public figured these men starting water companies were just scheming to get rich at the expense of the public," Murdock said. "In fact, people didn't want public water supplies back then. They believed that a well in each backyard was all that was needed." Oh, how times had changed.

The 1957 Association conference coincided with the birth of the Space Age. As attendees arrived in Atlantic City in early

October, the newspapers—and the conversation—were dominated by the Russians' successful launching of a remarkable satellite which was orbiting the earth. It was called "Sputnik." And it increased Americans' anxiety about who really was ahead in the technology race. Eisenhower dispatched U.S. troops again, but not overseas; this time they were sent to Little Rock, Arkansas, where mandated school desegregation had sparked mob violence.

(This was also the year the Hackensack and Spring Valley Water Companies dedicated their \$8 million DeForest Lake Reservoir in Rockland County, New York. The controversial five-mile-long reservoir, proposed a decade earlier, had been started in 1950, the year George Buck became president. Those first few years, promoting—and defending—the reservoir was a full-time job.)

Moses, Baxter Speak

Among the speakers at the conferences were two leading figures in the water supply business: Thomas W. Moses and Samuel S. Baxter. Moses, a lawyer and a Murchison protege from Dallas, had just succeeded "Scotty" Morse as president of the Indianapolis Water Company and would soon also be president of Philadelphia Suburban. He talked about IWC's intensive—and often frustrating—effort to gain acceptance for the company's new owners and managers. Baxter, an engineer who was the Water Commissioner in Philadelphia, talked about the disputed New York City withdrawals from the Delaware River watershed and his view of how withdrawal rights *should* be allocated.

Murdock, in closing remarks, gave one of his periodic pep talks about the importance of water service and members' obligation to make the public more aware of the value of their work and the need to invest to meet the next generation's water needs. "If we can do that," he said, "the matter of rates will be secondary. Americans are far more interested in good service than in low rates."

By the time of the Association's next meeting, Gov. Orville Faubus of Arkansas had defied Washington by closing Little Rock's public schools and reopening them as segregated private schools. The United States had answered "Sputnik" with its own orbiting satellite, "Explorer I," and the term "beatnik," first

uttered a year earlier by writer Jack Kerouac, was part of the American lexicon.

A Hint of Things to Come

The annual meeting in Atlantic City in 1958 was a sign of where the organization was headed: six of the nine speakers were from outside Pennsylvania. The PWWA was clearly looking beyond the state for ideas, recognition and support. With two years it would broaden its mission... and its membership. The format of the meeting's minutes changed that year, too. No longer did they list conference attendees, officers and committees and carry committee reports and financial statements; they just carried the remarks of the nine speakers.

Abel Wolman, of Johns Hopkins, presented an overview of the national water supply situation, citing a huge need for new investment in supplies, treatment plants, storage and transmission capacity. The way the suburbs were sprawling, Wolman said, traditional methods of planning were no longer adequate. New regional approaches were needed.

Frank Amsbary, Jr., vice president and manager of Long Island Water Corp.; Wendell LaDue, superintendent of the Akron, Ohio, Water Department, and Oscar Newquist, manager of Monmouth Consolidated Water Company in New Jersey, each spoke about operating methods he had found effective.

And Joe Beck wound things up, observing that "people in high places" seemed to have forgotten that it was the profit motive that had made the American economy the envy of the world. Regulators ought to harness its magic by creating incentives for utilities to improve their efficiency—and their bottom lines, he said.

Expansion Time

In 1959, Alaska became the nation's 49th state and Hawaii, its 50th. Cuban dictator Fulgencio Batista fled to the Dominican Republic and Castro became premier of a new communist bastion 100 miles from Key West. And President Eisenhower invoked the Taft-Hartley Act to break long strikes by the nation's steelworkers and longshoremen. The Pennsylvania Water Works Association passed into history that year when members approved a charter amendment expanding

its franchise to include Delaware, Maryland, New York, New Jersey and Connecticut. Its new name: The Eastern Water Company Conference.

In 1960, Sen. John F. Kennedy of Massachusetts beat Vice President Richard M. Nixon to retake the White House for the Democrats. At that year's annual conference, H.E. Hudson and A.W. Sawyer, engineers with Hazen and Sawyer, of New York, analyzed the impact of the dramatic housing boom of the 1950s on water company earnings. They predicted that many companies' earnings would fall sharply in the 1960s unless their rates were adjusted more expeditiously than they had been in the '50s. They said construction costs had escalated an average of 15% a year in the '50s and, denied rate relief, many companies would have to either reduce the "safety margins" in their treatment and distribution systems or cut their dividends.

"Customer growth without rate relief is a liability," they said. "It can destroy your earnings."

Murdock Urges 'Balance'

Murdock summed up that year by noting that the interests of customers, employees and stockholders appeared to be in conflict, but really were not. "They're all tied together," he said, "and no class should be sacrificed to advance the interests of another."

In 1961, the Russians continued to blaze space trails. They put two manned satellites into orbit. The U.S., playing catch-up, sent astronauts Alan Shepard and Gus Grissom on separate 300-mile rocket flights. In another Cold War development, East Germany built a wall between East and West Berlin to stem the flow of refugees to the west.

The Eastern Water Company Conference had a new board that year that included five members from New Jersey, two each from New York and Connecticut and one each from Maryland and Delaware. The Pennsylvania companies, with 15 directors, still controlled the conference. The three vice presidents were Ray Wendell, Pennsylvania regional manager for American Water; Fred Silliman, president of Bridgeport Hydraulic Co., and Bob Kean, president of Elizabethtown Water.

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Tom Moses

Neutral on Fluoridation

A new Legislative Committee reported on a Pennsylvania law which would require water suppliers to fluoridate in communities that approved it by referendum. The conference debated whether to take a position on the issue and decided it wouldn't.

George Dann, executive vice president of Philadelphia Suburban and a manager known as a "detail man," told the group that year (1961) the real measure of a manager was not how much paper work he turned out but "the decisions he makes that bring profit and goodwill to the company." The manager's toughest jobs, Dann said, were keeping a firm hand on expenditures and keeping in touch with what's going on around him, both inside and outside the company.

Yale economics professor Wight Bakke observed that year that union power in the United States had peaked and probably was headed for a decline, unless unions changed their ways. He said managements could speed this decline by managing "with the advice, consent and participation of their workers." (In fact, union membership had peaked at about 35% of the workforce in 1945, was down to 31% by 1961, headed for a low of about 12% today.)

Leo Louis, president of the Long Island Water Company, spoke about the advantages of investor ownership over municipal ownership of utilities. He claimed special insight on the subject because he had managed a municipal water system for many years. He said member companies ought to be stressing their unique operat-



James Ballenger

ing advantages at every opportunity.

Cold War Flares

The Cold War flared up briefly in 1962 when Soviet ships approached Cuba delivering an order of missiles to Castro. President Kennedy threatened an attack unless the ships turned around. Across the U.S. thousands of American families stocked their cellars with food and water and many planted bomb shelters under their lawns against the threat of Russian missiles. Eventually the Kremlin backed down.

(This was the year John H. Ware merged his Northeastern Water Company and American Water, which he had bought in 1947. Just before he died, a year later, Ware passed most of his interest in the company along to his two sons, John, III, who was to serve in Congress in the 1970s, and Willard, a Miami banker. Lawyer Ken Gemmill, a director of the company, and its president, Jack Barr, also were given blocks of stock.)

The Eastern Water Company Conference got an earful that year at its Atlantic City meeting from Donald Rogers, the financial editor of the *New York Herald Tribune*. Rogers, in a talk entitled "There Goes Free Enterprise," said if President Kennedy and his liberal economic advisers weren't reined in, "they'll screw up industry the way they screwed up agriculture." He predicted "economic disaster," given the way costs were increasing, the low level of capital investment in the U.S. and the growing economic strength of other nations. "Corporate profits were

\$22 billion in 1961," Rogers said, "the same as in 1950, yet Americans' individual income increased by 75% during that time."

John Murdock, then 76, spoke only briefly at the meeting, thanking outside guests and speakers for participating and the manufacturers' reps "for the Wednesday cocktail party," a gesture that became a popular feature of the meetings.

Troops: At Home and Abroad

President Kennedy dispatched 3,000 troops to Birmingham, Alabama, in 1963 to protect civil rights demonstrators after the Rev. Martin Luther King was arrested. In August, 200,000 civil rights marchers descended on Washington, D.C. The communists were marching, too . . . in Vietnam, so the U.S. increased its "military advisor" contingent there to about 15,000.

This was an auspicious year for the Eastern Water Company Conference. It broadened its franchise again, this time to include all 50 states. It elected directors from 25 states and changed its name, for the second time in four years, to the National Water Company Conference.

(Tom Moses stepped down as president of the Indianapolis and Philadelphia Suburban water companies in 1962 to head Investors Diversified Services, which the Murchisons had acquired. He was succeeded at IWC by Daniel P. Morse, "Scotty's" son, and, in Bryn Mawr, by James M. Ballenger, an old friend from West Virginia who, by a circuitous route, ended up with Jim MacIntosh's Philadelphia law firm and on the Philly Suburban board. Moses would return to the IWC presidency in 1969.)

Public relations returned to the NWCC's annual meeting agenda in 1963. Three speakers from Bozell & Jacobs, the New York City agency that did work for the iron pipe manufacturers, and the PR director for the Mueller Co., talked about communicating effectively and fending off municipal predators. Their tips: practice PR every day, and get professional help in crises. A.J. G. Priest, a professor of law at the University of Virginia, told the conference that "fair" regulation served the interests of all Americans and could be instrumental in fending off socialism. He urged members not to try to hamstring regulators, but "to work with them to make the system work better."

For the first time in 34 years, John

Murdock did not speak at the 1963 meeting. Just a month after the conference adjourned, President Kennedy was assassinated in Dallas and Vice President Lyndon Johnson succeeded him.

Vietnam Heats Up

By the summer of '64, America was again at war. After North Vietnamese gunboats attacked a U.S. destroyer in the Gulf of Tonkin, President Johnson ordered retaliatory air strikes and Congress authorized him to do "whatever is necessary to maintain the peace." At home, racial violence broke out in New York, Philadelphia and other cities. A new fad captured the night-life scene: discotheques, and their entertainment, go-go girls.

The National Water Company Conference, now with almost 300 members, introduced a new publication in 1964, *The Quarterly*. It would be the organization's voice until it was redesigned in the '80s and renamed *Water* magazine. Douglas McWilliams, of the Roaring Creek Water Company in Shamokin, Pennsylvania, stepped down as chairman of the executive committee, a post he had held for 17 years.

Murdock, opening the meeting in Atlantic City that year, said it had been "a shakedown year" for the now-national organization. He emphasized, however, that the conference's mission hadn't changed, that it would continue to be the voice of investor-owned water companies. The president also said it was crucial that the NWCC act by consensus, rather than majority vote, because its members, all volunteers, weren't really bound by conference's decisions and policies.

Suggestion Is Challenged

Murdock suggested that member companies might follow the lead of municipal suppliers and seek higher rates in outlying areas where service was more costly. But Phil Walsh, president of Southern California Water Co., challenged that idea.

"Varying rates would be the worst thing for our companies," he said. "They would cause fragmentation and invite municipal takeovers." His company had just fended off municipal acquisition initiatives in two Orange County communities.

Edward Thornton, a former New York PUC commissioner, told the conference



Frank E. Dolson

that utility operators were always extolling the free enterprise system. "Then, when you have a problem," he said, "you run to the government to solve it for them." You can't have a little government participation in your industry any more than an individual can have a little cancer, Thornton said.

Camille A. Garnier, president of Suburban Water Systems in California, spoke that year about the special problems of operating water systems in the desert. There were great opportunities in the Southwest, Garnier said, "as long as one can distinguish between a vision and a mirage."

At Odds on Vietnam

The United States got serious about Vietnam in 1965, putting 23,000 troops there by mid-year... and 184,000 by year-end. But many Americans weren't buying it and demonstrators took to the streets in cities across the country. Racial violence continued—in Montgomery, Alabama, and in the Watts district of Los Angeles. Anti-pollution laws also gathered momentum as environmentalists emerged as a political force. And questions arose about utilities' reliability when a power station failure in Ontario blacked out parts of eight northeastern states and two Canadian provinces.

A drought which had dogged the northeast for four years—and aggravated the

New York City-Philadelphia water rights dispute—dominated East Coast communications that year. And everyone's worst nightmare, more government encroachment, was coming to pass. The Water Resources Planning Act became law. It articulated a broad Federal water policy which, among other things, encouraged conservation and authorized the formation of river basin commissions. The Housing and Urban Redevelopment Act and the Public Works and Economic Development Act also passed, providing grants of up to 50% of the cost to communities building and improving water and sewer facilities.

John Murdock, in his opening address to the conference, discussed water shortages and blamed government policies under which large cities like New York didn't even meter customers and many investor-owned companies couldn't afford to build much-needed storage.

Murdock's Final Appeal

The last thing the industry needed, Murdock said, was more government intrusion. He urged NWCC members to help get his message to Congress. (It was to be Murdock's last appeal to his colleagues.) Jim Milligan, just hired as administrative director of the Conference, said that in the past five years, American communities had defeated 559 bond issues proposed for the improvement of municipal

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pal water works. That local failure to act created a void that the Federal government was filling, he said.

George Bloom, chairman of the Pennsylvania PUC, told the conference that some utility companies had staff or consultants who spent all their time fraternizing and building friendships with members of Congress and state legislators. "That's the only way you can get your message across," he said. "You water suppliers should be working harder to keep the Federal government out of your business."

Fred Allen, chairman of the Maine Public Utility Commission, addressed that meeting and was recognized as an energetic regulator with a keen interest in water supply issues. Allen could hardly have realized then what a key role he would play in the industry in a few years.

The Murdock Era Ends

In February, 1966, John H. Murdock died at age 79 at his home in Wynnewood, Pennsylvania. He was scheduled to speak in April at a meeting of the Missouri chapter of the AWWA. His speech, on the impact of the new Federal laws affecting the industry, was read by Chicago lawyer Robert Wilcox.

Murdock was eulogized by George Dann at the annual meeting of the Conference in Philadelphia, the first outside Atlantic City in 20 years. He described Murdock as "the center and circumference" of the organization which he had headed for 37 years. He remembered Murdock's forthrightness, his kindness, his broad knowledge of the utility business and utility law, his readiness to listen to—and counsel—his colleagues, and the pride in the industry he personified and communicated. Jim Milligan, at 31, acknowledged that he wouldn't be able to fill Murdock's shoes but said he would give it his best on an interim basis. Jack Barr was elected chairman of the executive committee and he and President Fred Silliman set about finding a successor for Murdock.

Reich Touts Marketing

Jack Reich, chairman of the Indianapolis Water Company, told members that year that water companies "can't afford to sit round on their monopolies," that they

had to create and market new products and services. Reich, whom Murdock had once said was good for the business because he knew nothing about it, told how IWC, despite objections from Indianapolis plumbing contractors, was selling and installing sprinkler systems and garbage disposal units. Jack Barr moderated the first regulator-industry panel discussion that year—on main extension policy. It included commissioners from four states and company executives from four others. Each advanced his views on how to finance and recover in rates the cost of two hypothetical main extensions.

In January, 1967, two conference officers, Bob Kean of Elizabethtown and Frank Dolson, of St. Louis County Water Company, went to India at the behest of U.S. Surgeon General William H. Stewart to help water suppliers there address some problems.

By then, the war in Vietnam was seriously dividing the nation. The United States had almost 500,000 troops there and marchers—both anti- and pro-war—were in the streets in New York, San Francisco and Washington. Racial violence also flared that summer in Newark, Cleveland and Detroit.

In that summer's NWCC Quarterly, Milligan noted that the huge influx of Federal money into municipal water systems was putting some 5,000 investor-owned systems in jeopardy. NWCC members were paying taxes to support grants for their competitors while officials of the towns they served were talking acquisition to get access to the federal funds, Milligan said. Some way had to be found to make investor-owned systems eligible for the grants.

(That was the year Philadelphia Suburban Water Company, looking desperately in its booming services area for a site for a new reservoir, bought a 33-acre, 400-foot-deep quarry from Bethlehem Steel Company as a billion gallons of ready-made storage.)

At the annual meeting in Pittsburgh that year, the Conference accepted Milligan's resignation. He had landed another trade association job. The executive committee authorized funds to engage a part-time consultant to improve liaison with state regulators. George Dann succeeded Silliman as president.

The following year, 1968, was a tumultuous one in American politics. Martin Luther King, Jr., was assassinated in April and presidential candidate Robert F. Kennedy was fatally shot two months later as he celebrated a California primary victory. Rioting marked the Democratic National Convention in Chicago. Richard M. Nixon won the White House in November.

Allen Takes Over

In January, 1968, Fred Allen accepted the job as administrative director of the Conference. Allen, who was 53, had served in both houses of the Maine legislature. He had been a utility regulator for 14 years and chairman of the Maine commission for nine years. He was instrumental in getting water issues on the agenda of NARUC's regional conferences and in the formation of the new NARUC Water Committee.

Allen said he took the job over three other "hard" offers because the organization was small; the job, challenging, and he was impressed by the Conference leadership. He, in turn, impressed the executive committee with his energy and his willingness to question some of the organization's ways.

Allen's first tasks were to move the Conferences' headquarters from suburban Philadelphia (where it had been situated for Murdock's convenience) to Washington, and to strengthen the NWCC's liaison with state regulators. He also worked to start state sections and for legislation to broaden the Federal grants programs to include investor-owned water suppliers. (Allen said he was taken aback, after heading a commission with a staff of 115, to find just himself and a secretary in the Conference office.) He hired two people that first year.

Federal legislation to create a National Water Commission was moving through Congress that spring, but it got tied up with the Central Arizona Project and its prospects were uncertain.

In February, 1969, President George Dann wrote his first report to members from Washington. He told of committee meetings at the new Washington office (at 425 13th St. NW) and of luncheon meetings with members of Congress and their aides. The thrust of his report was that the Conference was now where the action



Fred Allen with Edmund Muskie

was, and it was wasting no time taking advantage of its new strategic location.

(In fact, Allen said, Jack Barr had offered to make room for the Conference at American's Alexandria Water Company headquarters and Tom Moses had offered office space in Indianapolis. But the executive committee opted for the DC office.)

A Warning from Kelly

In April, James M. Kelly, a Pennsylvania PUC commissioner who had succeeded Frank Nunes of Rhode Island as chairman of NARUC's Water Committee, told a committee conference at Iowa State University that neither water suppliers nor state regulators were doing their jobs in Washington. That failure was opening the door for Federal water legislation, he said. The hour was late, Kelly said, and unless the industry got busy, the government was

going to end up running all the water companies.

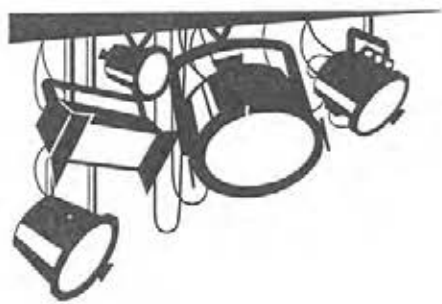
This was the year the United States started withdrawing from Vietnam. America put its first men on the moon. And Sen. Edward Kennedy drove a car off a bridge on Martha's Vineyard causing the death of a woman passenger... and eclipsing any presidential aspiration he might have had.

The 1969 NWCC meeting was in Arlington, Virginia. It was the organization's biggest meeting ever—as Allen recalls, the registration was about 600—and the first ever held outside Pennsylvania or New Jersey. Frank Dolson took over as president and Jack Barr was elected chairman of the board. The conference drew about 20 regulators despite the fact that NARUC's annual meeting in Denver followed it by just a few days. Allen, Barr and Dolson went right from Arlington to Denver. Barr

and Dolson, speakers in Denver, told the regulators the water business was in poor health and could not long survive on the puny rate adjustments companies were getting. Dolson said water company stocks were "poison at the box office." All they wanted, he said, was the same rate of return electric and telephone companies were getting and to be able to compete on an even playing field with municipal suppliers.

Out of the Arlington meeting came a whole new agenda for the 1970s. It was to include "midyear" board meetings in the spring and an extra day at the annual conference for committee meetings. Allen set a frenetic pace that was to characterize his 14 years as administrative director. ♦

Next: Environmentalism grows, the EPA raises quality standards and mergers help address small-company problems.

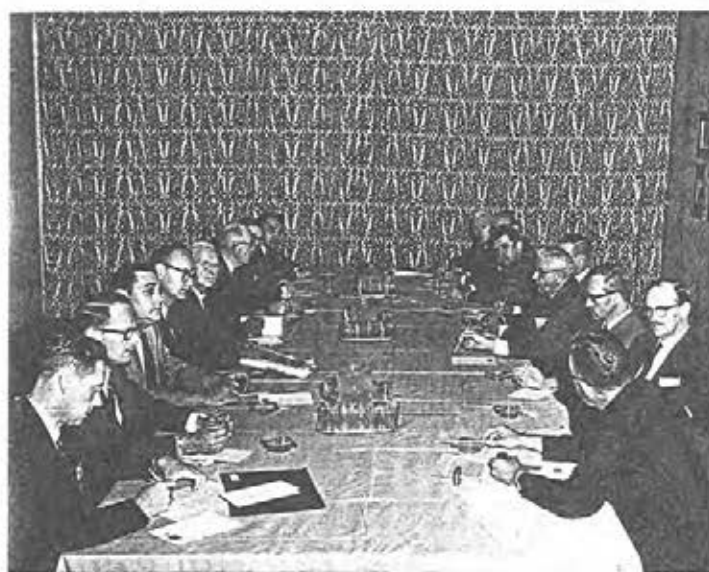


Annual Conference 1969





Annual Conference 1970



Expanding Your Product and Service for Increased Profitability

OR

"I Seen My Opportunities and I Took 'Em"

*presented by James L. Good
Vice President, Corporate Communications and Marketing
California Water Service Company*

at the

*2nd Annual Water Industry Conference:
Partnerships in Privatization*

April 12, 1995

*The Helmsley Park Lane Hotel
New York, New York*

Good afternoon. My name is Jim Good. I am Vice President of Corporate Communications and Marketing for the California Water Service Company, known as Cal Water. It is indeed a pleasure to address the Second Annual Clean Water Industry Conference on the topic of "Expanding your product and service lines for increased profitability."

If you're like me, when you read this title in the program, you probably scratched your head and thought, "Huh? What does that mean?"

George Washington Plunkett, as you students of history will know, was a member of New York City's infamous Tammany Hall, the political machine that ruled the City off and on for nearly a century.



George Washington Plunkett

Sometimes known as the Sage of Tammany Hall, he is renowned for two

sayings concerning the operations of the Hall. One was explaining the difference between honest graft and plain old ordinary graft. His other famous saying was, "I seen my opportunities and I took 'em." In business jargon, we would call this approach "Asset Maximization." Both of these slogans aptly describe today's topic.

Why Maximize Assets?

Now that you know what my topic is, you might be wondering why you should maximize assets. There is really no reason to do this in a regulated utility since they can always file a rate case seeking more revenues when they fail to meet their authorized rate of return—with the impact on retail rates a secondary concern at best.

At least, that's the old way of thinking about water utilities. Now, with competition for service, there is incentive to keep the price of regulated water service down. One way to do this is to—at least—maintain the same rate of return by realizing profits from under utilized (and usually unregulated) company assets. Every utility here—regulated or not—has the capability to increase or maintain profits by maximizing the use of such assets.

This is precisely what we are doing at Cal Water. Before I provide examples of asset maximization, a little information about the company is in order. Cal Water has been in operation since 1926. We now provide service to 365,000 customers in 38 communities statewide. No strangers to privatization, we have taken over 80 systems since 1926, 25 since 1980. We also operate three municipal and one mutual water system under contract. This is standard fare for a water utility. However, we also engage in some unregulated activities that demonstrate the principal of "asset maximization." These activities fall into two primary categories: recycled water and utility billing services.

Recycled Water

Recycled water is reclaimed wastewater used for non-potable purposes such as irrigation and some industrial processes. Basically, recycled water is the process of getting wastewater from here:

To here:



You can use your imagination to figure the process out. Or, you can consult the chart below.

You can see the variety of uses for which tertiary treated wastewater—recycled water—can be used.

The use of recycled water is growing in California. Despite record rains this year, over the long-term, the State is expected to face water shortages even in normal precipitation years. In November 1994, the California Department of Water Resources issued Bulletin 160-93 which stated that by 2020, California would have water shortages of 3.2 to 5.7 million acre feet in average water years and 7 to 9 million acre feet in drought years.

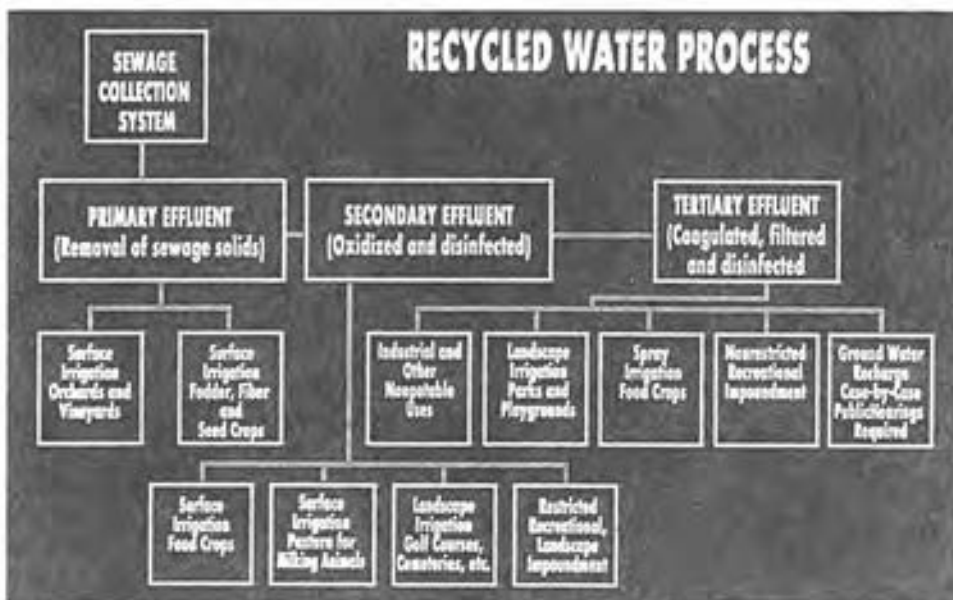
To help meet the shortfall, it is State policy to encourage the use of recycled water. The Water Recycling Act of 1991 has as its aim the use of 700,000 acre feet per year (AFY) by 2010. California is well on its way to meeting its goal—already 400,000 AFY is used.

Two of the largest recycled water projects are in LA's West and Central Basins. We operate large portions of both distribution systems for a flat fee and cost-plus basis. We are overseeing the preparation of the West Basin system and have been designated the lead contractor for O & M on the Central Basin. The company was recently invited to design and oversee construction of a 13 mile extension of the Central Basin system. With the experience gained in this area, Cal Water is quickly becoming a leading expert in recycled water distribution systems. We fully expect to win other such contracts in the State. In this case we have maximized our most important asset—our personnel.

Utility Billing

Another area that is very promising for us is adding municipal utility charges to our bills.

Cal Water has one of the most advanced billing systems of any industry in the country. Don't believe me? Believe the statistics: Average of only 1 mistake per 100,000 items processed; an award from the United States Postal Service; and two



NAWC Management Innovation awards. Or better yet, come look for yourself. I'm happy to show our billing operation to any interested party.

Every month 400,000 accounts are billed. That means every day 20,000 accounts are processed and by only four employees. And we have excess capacity which we are putting to work billing for other utilities.

This area has expanded considerably because cities have reached a point where they must decide if they are going to modernize their billing systems. One alternative is to have us do it. If we are already in the service area, we can do it for less. Even when we are outside the service area, we can often do it for less than a city can since we have few variable costs to cover.

Cal Water is currently billing for seven municipalities and negotiating with many more. Utility billing for municipalities is one example of maximizing a physical asset: computer time.

Other Services

Two other promising areas look to be system design work and meter reading water systems. As I mentioned, we have been asked to design a recycled water distribution system. We can usually do it cheaper than a consulting engineer. Plus, we don't over-design.

The other area is meter reading. We are actively bidding for several meter reading contracts. Again, we can be fairly competitive here since there are few variable costs to cover.

But with every opportunity comes competition. Even in the water utility field there is lots of it. For example, in Southern California the local electric utility is aggressively (and successfully) seeking meter reading contracts. They have even approached us about reading our meters. At which point we informed them of our interest in reading theirs. Despite the competition, we expect to win some contracts in this area.

So what is the benefit of asset maximization?

Well, as I stated earlier, it is a way to maintain or increase your company's profitability. But it is also a way to differentiate your product, thereby making yourself more attractive to prospects and increas-

ing the number of contracts you win.

When most people think of water utilities—if they think of them at all—this is what they think of:

What's the difference? We all provide the same product pretty much at the same level. There is very little product differentiation. After all, water is fungible.

Those of us in the industry know this is not exactly true. Every company is in reality different from every other, with different strengths and weaknesses. Cal Water happens to be the best at everything, but all the other companies can point to at least one area where they clearly outshine the competition. But the essential point is that to laymen—and especially laymen who serve on city councils—there is no difference from one water utility to another.

On top of selling a fungible product in a regulated sector we have another problem. Resistance. Let's face it. Most municipalities don't want us in—even when the

only asset they can sell to get back to solvency is the water system. Often times they believe they run their systems more efficiently than we can! Therefore, spending hundreds of hours of valuable staff time on proposals that many cities don't want and which they won't distinguish between anyway can be frustrating, fruitless and profitless.

To guard against wasting resources, Cal Water has learned to differentiate its product. By maximizing our assets and capabilities we can provide more than most traditional O & M services. When we make a proposal to a city to buy or operate the water system, we break out some of the services. This way, even if we don't get the water system, we might get a service like billing or meter reading. This contributes to the bottomline, provides us a way to remain competitive in an increasingly competitive market and helps maintain earnings even when there is pressure not to file for rate increases. ▲

Tammany Hall, Aaron Burr and Investor-Owned Water Utilities¹

Tammany Hall—the quintessential urban political machine. It ruled New York City off and on for a century. Believe it or don't, one of its earliest lessons in practical politics came from Aaron Burr through his establishment of a private water utility serving New York City.

In the late 18th Century, before it represented ethnic immigrants, Tammany Hall represented small businessmen and other less monied interests. At the time, in order to vote—and only men could—one needed to own land. Then, as now, the essential ingredient to owning land was money which, as always, was available primarily from banks. But the city's only bank, the Bank of New York (founded, incidentally, by Alexander Hamilton) would not loan to the "kind of person" who belonged to Tammany.

The State of New York—at Hamilton's urging—would not charter a rival bank. Enter Aaron Burr (famous for outdueling Hamilton). It was from Burr that early Tammany Hall members learned many of their methods as aides during his bid for

the Presidency in 1800. Out of office and casting about for projects on which to dedicate his skills, Burr set about creating a rival bank.

While Tammany Hall members needed a bank, so they could borrow money to buy land and vote, New York City needed a dependable water supply. Burr put together a coalition in support of a state charter for the formation of the Manhattan Company to supply water. As the legislation moved through the legislature, at the last minute, Burr added a provision to the charter permitting the Manhattan Company to invest surplus funds in any manner that did not contravene the laws of the State. Thus was born the city's water supply company, the Bank of Manhattan Company (which eventually became the Chase Manhattan Bank) and the seed money for Tammany Hall's early power base. ▲

¹Freely excerpted from *The Tiger*, Oliver E. Allen, Addison-Wesley Publishing Company, 1993

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WORLD/US

Tri-County Water Supply Project Will Bring a Reliable Long-Term Water Supply to a Region in Need

by Howard J. Woods, Jr.
Vice President, New Jersey-American Water Company
Haddon Heights, New Jersey

In 1986, the N.J. Department of Environmental Protection (DEP) designated an area of southern New Jersey as a Water Supply Critical Area because the Potomac-Raritan-Magothy (PRM) aquifer that serves the region was being depleted faster than nature could replenish. The DEP also identified the Delaware River as the only reliable long-term alternative water source to the endangered PRM. In response, New Jersey-American Water Company proposed the Tri-County Water Supply Project, which will treat Delaware River water, as the solution to the region's water supply problem. The DEP endorsed the Project as the most viable option, and requested the water company to design, finance and construct an intake, pumping station, treatment facilities, and transmission mains to satisfy regional water needs.

The Project

When completed at the end of this year, the Tri-County Water Supply Project will draw water from the Delaware River, treat it in a state-of-the-art filtration plant, and deliver it through an extensive pipeline system to as many as 55 communities in Burlington, Camden and Gloucester counties in New Jersey. Until now, southern New Jersey has relied almost exclusively on groundwater sources for its water needs. Now the situation will change. With the completion of the Tri-County Project, the region will, for the first time, depend on a surface water source for a major portion of the water supply. However, surface water is more expensive to treat and maintain than groundwater. This means that residents of southern New Jersey will be paying the same for water as their neighbors in other areas of



Howard J. Woods, Jr.

the state who already rely on surface water supplies.

In developing the plans for the Project, New Jersey-American consulted with local, state and federal authorities to ensure that reliable water service and protecting the environment were the top priorities considered in the design and construction of each component.

The Pumping Station

About 800 feet from the Delaware River's bank in western Burlington County, a new raw water pumping station is being constructed. River water will flow by gravity to the pumping station through two nearly 1800-foot-long pipes, both 54 inches in diameter. The ends of the intake pipes are located in the river about 1,000 feet from the bulkhead line at the shore, within the New Jersey state boundaries and outside the designated shipping channels.

As part of its environmental commitment, New Jersey-American consulted with the DEP's Coastal Resources Division, the U.S. Fish and Wildlife Service,

the Army Corps of Engineers, and other regulatory agencies during the design of the intake. As a result of those efforts, the decision was made to locate the intake 5 feet above the river bottom, which is nearly 15 feet below the average low tide level. The ends of the intake pipes are constructed of wire screens similar to well screens. Functionally, the screens prevent debris from damaging the equipment and pipe. More importantly, though, they also reduce the impact that pumping will have on river life. The screens' openings are small enough to prevent fish and other wildlife from getting drawn into the intake pipes, yet large enough to allow the pipes to function effectively. The screens and the intake pipes are visibly marked at the water surface with buoys or other markers.

New Jersey-American and the environmental agencies also agreed that chlorine will be added occasionally at the intake to help clean the raw water line leading to the treatment plant. In addition, the processes being established at the intake will help the company control zebra mussels, should they be detected in the Delaware River. Zebra mussels have fouled many intakes in this country and could be found in the Delaware River in the future.

The intake pipes lead into two wet wells located in the pumping station. Two pumps in each wet well will deliver the water to the treatment plant. This configuration provides the necessary reliability and permits routine maintenance. Powered by electric motors and controlled by a computer system at the treatment plant, these pumps will be backed up by generators to supply power during electrical failures.

New Jersey-American has a water allocation permit to allow for the withdrawal of up to 40 mgd from the Delaware River. This withdrawal is very small compared to the amount of water in the river: the minimum amount of water that flows past the intake site during a severe drought is nearly 2,000 mgd; after a heavy rain, the amount might be as much as 7,750 mgd.

The Treatment Plant

The treatment plant's initial capacity of 30 mgd is expected to meet the region's most immediate water demands, including New Jersey-American's customers' needs. The plant is designed to allow for capacity expansion in 10 mgd increments up to 100 mgd, as demand for water from the Project grows. The plant is designed to conform with disinfection byproduct regulations that may be adopted in the future by the U.S. Environmental Protection Agency or the N.J. DEP.

From the pumping station, raw water from the Delaware River will be pumped through a 2-mile-long, 54-inch diameter pipeline to the treatment plant site. From there, it will flow into a 15-million-gallon storage basin located at the lowest point of the property. Water will then be pumped to the treatment plant where it will flow by gravity through the remainder of the treatment process.

Before entering the treatment process, the water will be tested while it is in the basin to identify normal fluctuations in the quality of raw water so any irregularities can be detected early and treatment

adjusted accordingly. Because of the basin's capacity, it can provide a temporary supply of water in case the intake ever needs to be closed for some reason.

To identify the best treatment methods, New Jersey-American conducted a pilot study in 1990. The company needed to determine the most effective method of treating the water from the Delaware River to ensure that it will meet or be better than all state and federal water quality standards. The results of the pilot study determined that the best approach is a process using a number of steps and treatments.

The pilot study showed that ozone provides superior particle removal while keeping the production of trihalomethanes (THMs) and other disinfection byproducts to a minimum. As a result, ozone will be used as the primary oxidant in the treatment process.

After the addition of chemical coagulants, most of the solid matter in the raw water will be removed by a Superpulsator®. This unit is the most flexible and cost-effective means of clarification identified by the pilot study. In addition, the unit is much smaller than more traditional devices. This size advantage produced lower construction costs by reducing the amount of space needed compared to other traditional designs.

Deep-bed, granular activated carbon (GAC) filters will be used to remove additional solid particles and control taste and odor. GAC filters will also give additional protection in case of an oil or chemical spill in the river.

The final disinfection process will use chlorine, primarily because it is the disinfectant now used by New Jersey-American and the other water suppliers who may purchase water from the Project. New Jersey-American conducted extensive research in cooperation with other water utilities in the area to examine the effects of blending treated surface water with ground water supplies now in use. Results of that research were used in the plant design to ensure that Tri-County water will be compatible with and equal to the quality of well water.

The Transmission System

An extensive pipeline system, incorporating transmission mains as large as 54 inches in diameter, will carry water from the treatment plant to each of the communities that wish to purchase water from the Project. To keep construction and operating costs to a minimum, New Jersey-American is using existing local water mains and distribution systems wherever possible. In addition, pipeline routes are designed to protect the environment and to minimize disruption of existing utilities, traffic patterns and private property.

To select the specific pipeline route through the counties, New Jersey-American consulted extensively with local, county and state transportation officials; township councils; and utility representatives to develop a route that would be the least disruptive to the communities through which it passes. Every possible

(continued next page)

Critical Area #2

- Depleted Area Boundary
- - - Marginal Area Boundary



Tri-County Project, continued

route was analyzed for the following factors: the ability to install pipe with minimal interference to existing utility lines; new or pending construction of roadways; inconvenience to local residents; potential for short- or long-term environmental damage; cost of construction; and the trade-offs between installing the pipeline in existing roadways or on private property obtained through purchasing easements.

As the specific streets and easements along the proposed route were identified, New Jersey-American worked with property owners and residents who would be affected. Company officials explained the route selection process, reviewed construction details, answered questions and addressed concerns, and solicited public comments. New Jersey-American wanted everyone who would be affected by construction to understand the Tri-County Project and how it is the best regional solution to South Jersey's water supply problem. To that end, the company held community meetings, established a toll-free hotline, published and distributed a quarterly information newsletter, and mailed other relevant materials to people interested in or affected by the Project. The mailing list for this information consists of more than 5,000 people. The company also worked with the appropriate government officials to acquire the necessary permits for construction.

At The Top

As a result of careful planning and extensive research for the Tri-County Project, New Jersey-American plans to deliver the highest quality water to the region into the next century. When residents begin receiving water from the Project next year, they will be able to turn on their faucets and receive a clean and reliable water supply. In addition, because the water from the Project will be mixed with the water they currently drink, most people will experience very little taste difference, if any. Once treated, water from the Delaware River will be as good as or better than water currently pumped from the ground. The state-of-the-art treatment processes and the extensive pipeline system of the Tri-County Project will help to ensure that good, clean, safe water will always be available to the region when it's needed. ▲

NEW JERSEY-AMERICAN WATER COMPANY TAKES THE LEAD TO SOLVE REGIONAL WATER SUPPLY PROBLEM

by Daniel L. Kelleher
President, New Jersey-American Water Company
Haddon Heights, New Jersey

What do you do when you run out of water? Communities in southern New Jersey hope they never find out. That's why, when the N.J. Department of Environmental Protection (DEP) designated an area of South Jersey as a Water Supply Critical Area in 1986, private, public, municipal and state organizations rallied together to find a solution to prevent this worst-case scenario from coming true. The Potomac-Raritan-Magothy (PRM) aquifer, the major water source for Burlington, Camden and Gloucester counties in South Jersey, was being depleted faster than nature could replenish it. If the situation continued unchecked, the PRM could become permanently contaminated, rendering it useless; the tri-county area in southern New Jersey would be without a long-term reliable water supply.

According to the DEP, the Delaware River was, and is, the only reliable long-term alternative water source to the endangered aquifer. Concerned groups, such as the Delaware Valley Regional Planning Commission, the Tri-County Water Quality Management Board, the Delaware River Basin Commission, and water suppliers in the Critical Area including New Jersey-American Water Company, worked with the DEP to identify the most cost-effective and viable way to use the Delaware River water.

These organizations determined that a regional project to provide water from the



Daniel L. Kelleher

Delaware River would be the best approach. New Jersey-American Water Company took the lead and proposed the Tri-County Water Supply Project to solve the supply problem. The Project would be developed in keeping with the company's environmental and community commitment, while also making sound business sense. The DEP endorsed the Tri-County Project as the most viable approach and requested the company to plan, design, and build an intake, pumping station, treatment facilities, and transmission mains to satisfy regional water needs.

Today, the company is proud of its accomplishments. It is ready to deliver, on

time, the largest public water supply project ever undertaken in New Jersey. In addition, the \$186 million cost for the Project is within the 1986 cost estimate forecasted by the DEP's consultants.

NEW JERSEY-AMERICAN WATER COMPANY

New Jersey-American Water Company decided to take the lead on this vital regional project because the company is the largest water supplier in the tri-county area, currently serving more than 250,000 people in 34 communities throughout Burlington and Camden counties. Plus, the company has vested interest. It is located in the Critical Area, and many of its employees live in the affected area as well. For these reasons, it was a logical choice that New Jersey-American take the lead in solving the problem.

THE BENEFITS

Even though the amount of time and money invested to make the Tri-County Project a reality is significant, New Jersey-American and the DEP are confident that the investment is worth it; the benefits of the Project are priceless! When completed, the Tri-County Project will ensure a reliable and adequate water supply for many years to come. Southern New Jersey residents will be able to maintain the quality of life they have come to enjoy without the threat of extreme water restrictions such as those imposed in other areas of the country. New Jersey-American's customers, as well as customers of other water suppliers purchasing water from the Project, will continue to turn on their faucets and receive high-quality water whenever they need it. In addition, protecting the PRM will help preserve other nearby aquifers.

While it is true that some customers will be paying more for water, the cost for this essential supply of water is minimal when compared with the costs of other necessities and luxuries taken for granted in most people's daily lives. The majority of residents would agree that paying an additional monthly fee equal to the cost of a medium pizza, a premium cable channel, or a few video rentals, is worth it in return for safe and reliable water delivered to their taps every day. Compared with other utility bills, water is still a bargain.

THE PROBLEM

The history of the region's water supply problem dates back to the early 1900's when population in New Jersey's Burlington, Camden and Gloucester counties began to grow steadily. Until then, the area consisted mostly of woodland and farms with only a few towns dotting the area. During World War II, population in the tri-county area flourished, and as the number of residents and the amount of industry grew over the years, pumping from the PRM aquifer increased to meet the heavy demand for water. However, while pumping increased, recharge remained stable. Thus, the level of water in the PRM declined for many years.

Although population growth has continued with undiminished force since 1970, water use from the PRM did begin to level off around then. At that time, families began to do their part to voluntarily conserve water, with state and local governments reinforcing that efforts. Industrial growth that had boomed in the tri-county area over several decades began to taper off considerably.

Even though the amount of water being taken from the PRM remained stable during the 1970s and early 1980s, the state found that the aquifer's average water levels throughout the region were still declining. In areas where growth continued at a steady pace in the early 1980s, water levels continued to decline at about 2 feet per year. This decline resulted because continued pumping from wells located near the river captured the recharge that otherwise would have flowed through the aquifer to replenish parts of it further east and south.

The overburdened PRM was in danger of becoming permanently contaminated with hazardous materials from surface recharge or by underground salt water intrusion. The treatments needed to remove hazardous materials and salt are expensive, as are efforts to use larger pumps and drill deeper wells to compensate for lower aquifer water levels.

THE BEST SOLUTION

The Tri-County Water Supply Project represents a unique partnership between communities that need an additional water supply; the DEP, which manages the state's water resources; and New Jersey-

American, which is responsible for designing, constructing and financing the much-needed water supply alternative.

Several years after designating the Critical Area, the DEP ordered water suppliers who depend on the PRM to reduce their withdrawals from the aquifer. Because the DEP endorses the Tri-County Project as the regional alternative needed to solve the region's water supply problem, the cutback mandate goes into effect in January 1996 when the Project goes on line and is able to provide a supplemental source of water. Purchasing water from the Project will be one alternative available for reducing dependence on the PRM, but it is not the only option. Water suppliers are permitted to explore all alternatives available to them within the environmental limits established under DEP regulations.

Over the long term, the Tri-County Water Supply Project will be the most cost-effective solution to the region's water supply problem. There is no "do nothing" alternative to meet the DEP's cutback requirements. It will cost money to supplement reduced PRM withdrawals, whatever measures are taken. If every community were to develop its own project for a supplemental water supply, the cost to the region would be much greater than for the development of a single, regional project. Similarly, if New Jersey-American built the Project to serve only its customers, the cost of water would be much higher for them.

With these realities in mind, the towns that expect to purchase water from the Project asked New Jersey-American to make the cost for the water as low as possible—and it has. A major component in the company's continuing efforts to maintain the lowest possible price for water is a financing arrangement made between New Jersey-American and the New Jersey Economic Development Authority (EDA). In November 1994, New Jersey-American received a \$100 million tax-exempt financing package from the EDA. There has never been a larger tax-exempt offering issued in the United States by an investor-owned water utility.

This financing arrangement demonstrates the benefits of private industry partnering with a public entity for the public good, and was significant for New Jersey-American for two reasons. First, it demonstrated the company's ability to

(continued on next page)

obtain the same low-cost capital available to municipal water authorities and public agencies. Second, the financing helped the company contain the total cost of the Tri-County Project. The bond package is expected to save customers up to \$2 million a year in financing costs, for a total of up to \$80 million over the 40-year financing period.

SUPPORT AND RECOGNITION

New Jersey-American's efforts on the Tri-County Project have received support and recognition from many business and environmental organizations, as well as from government leaders. The Water Resources Association of the Delaware River Basin gave New Jersey-American the 1993 Special Recognition Award for developing the Tri-County Project. The Chamber of Commerce of Southern New Jersey has recognized the environmental merits of the Project with its 1995 Pinnacle Award. The Southern New Jersey Development Council honored the Project with its 1994 Environmental Distinguished Achievement Award. In 1993, the PENJERDEL Council issued a formal resolution supporting the Tri-County Project. And also in 1993, then-Governor of New Jersey Jim Florio recognized and commended New Jersey-American for its work on the Project. The company has also won recognition for its public information and community involvement programs from the NAWC, as well as from several chapters (Philadelphia, New Jersey) of national and regional public relations associations.

THE FUTURE

As New Jersey-American Water Company enters the final year of a highly successful construction program, the company looks forward to the many benefits this Project will offer its customers and other residents in the South Jersey region. January 1996 will mark the beginning of a new water supply source that will provide the residents of southern New Jersey with a safe, reliable water supply into the next century. Completion of the Tri-County Water Supply Project will be a significant milestone for the company, the state, and the water users of South Jersey. ♦

Safe Drinking Water Act Compliance— RATEMAKING IMPLICATIONS

*Presented to the National Conference of Regulatory Attorneys
Scottsdale, Arizona
May 15, 1995*

*by Scott J. Rubin
Public Utility Consulting*

In many states right now, water is hot. Well, let me rephrase that. We're here in the middle of the desert. Whatever water there is here is hot. What I mean is that, for utility commissions, water is becoming significantly more important than it used to be.

The nuclear power plant cases of the 1970s and 1980s are behind us. The telecommunications industry is on its way to being deregulated. The big natural gas issues—Order 636 and the like—are behind us. The electric industry is in the midst of the same types of widespread changes that gas went through—possibly leading to a lesser role for state commissions.

Of the traditional, natural monopolies regulated by your commissions, water is the only one that's left. And, believe me, no one in the water industry is saying a word about eliminating rate of return, cost-plus regulation. Because costs are going up, investment is going up, returns to stockholders are going up, and yes, water rates are going up.

What's going on? You know the theory of "convergence"? No, not the one in the communications industry—where all the whiz-bang technologies are going to come together and be delivered to you over one cable. I'm talking about the kind of convergence that only a regulator could appreciate. I've given it a simple acronym: HITS—for Health, Infrastructure, Technology, and Size. Of course, those of you who have dealt with the problems of small

water systems may think that Size belong first—I'll leave that up to you. But whatever you call it, it's all hitting the fan at the same time.

Converging Force Number One: Health. The regulatory requirements for providing safe water have become much more stringent. The USEPA has issued dozens of new regulations during the past few years, and they're not finished yet. Each new set of regulations carries an increased cost for testing and monitoring, brings with it the risk of non-compliance (resulting in possibly expensive capital improvements), and makes it even more likely that small water systems will fail. That's the "H"—health-based requirements for providing water and becoming more stringent. And that means they're becoming more costly and more complicated.

Converging Force Number Two: Infrastructure. Even if the SDWA requirements were not changing, the water industry would be spending hundreds of millions of dollars on its infrastructure. Water mains don't last forever. In many of our largest cities, the water mains are more than 100 years old. When you see the news clips of city streets flooding from main breaks—that's not just "accidents will happen"—it's a sign that our basic infrastructure is failing.

And it's not only a big city problem and it's not just an East Coast problem. The huge post-war building boom in the sub-

urbs and in the West was 50 years ago. Many of the materials used in those systems were substandard—not always because someone was cutting corners, but because high-quality materials were in short supply after the war. As one utility executive, who serves a largely suburban territory, told me: Water mains that should have lasted for 100 years are starting to fail after only 40 or 50 years. The quality of the metal is just not good enough and it has to be replaced.

What does it mean when we say that water mains that are 50 or 100 years old have to be replaced? Most of us use original cost ratemaking. These facilities are in the books at probably around \$1 per foot. To replace them will cost somewhere in the range of \$50 to \$100 per foot. When we're talking about hundreds of miles of mains having to be replaced during the next two decades, we're talking about a huge investment. And that means a huge increase in rate base—and in water rates.

And it's not just water mains. Filter plants, dams, wells, pumps—none of it lasts forever. Many water systems have been able to cut costs, defer maintenance, and put off their problems for the future. And the future is now. So, my "I"—Infrastructure.

Converging Force Number Three: Technology. We're living through one of the greatest technological revolutions in history. Just during the past twenty years computers have gone from something that fills a building in a university to something that will fit in your pocket. Communications and computational technologies are mind-boggling—not to mention fun, exciting, and expensive. And water utilities are not above being dazzled by it all. Water companies are investing millions of dollars in new technology—and it has nothing to do with the Safe Drinking Water Act or any other regulatory requirement. They think that the new technologies will make them more efficient, more productive . . . or just let them have new toys to play with. Can things like SCADA, automated meter reading, and GIS systems save money in the long run—sure they can, if they're properly planned and implemented. And if they're not properly planned and implemented—costs will go up and we'll have little to show for it. That's "T" for Technology—it will force costs up in the short run. You better make

sure that there's a big payoff down the road, or we're just throwing money away.

Finally, my Forth Converging Force: Size. The problems with small water systems are coming to a head. Through a combination of factors—the age of the systems, increased regulatory requirements, increased public awareness, among others—it is becoming increasingly clear that many small water systems cannot provide safe and reliable service to their customers over the long term. We are looking for ways to deal with this problem—and none of them are free. Physically connecting systems costs money. Upgrading small systems costs money. Providing new management networks costs money. Providing low-cost sources of capital costs money. Ignoring the problem costs a lot of money. Even studying the problem costs money.

What does all of this—HITS—mean to you? It means the water utilities you regulate are facing significantly increased expenses. It means that they are likely to be engaging in major capital construction projects. It means that there will be mergers and consolidations, bankruptcies and receivership proceedings. It means that water utilities will become riskier, making it harder for them to raise money, and increasing the cost of capital. It means that more rates cases will be filed, pushing rates higher, leading to more angry consumers. This means more public hearings, more tough decisions for commissions, and more water customers who can't afford to pay their bills.

Does this sound like the electric industry during the 1970s and 1980s? It sure does. And how did we—as commissions and consumer advocates—respond? We got innovative and tried to find ways to moderate rate increases. We conducted construction prudence reviews. We argued about excess capacity. We implemented lifeline rates, percentage of income payment plans, discounts for the elderly, and other ways to help low-income consumers. We went to monthly meter reading and billing. We encouraged demand-side programs, including elimination of steeply declining block rates. We instituted integrated resource planning requirements. We did everything we could to try to get some control over runaway electric rates.

And in this decade and the next, we'll find ourselves doing the same things with water. Some commissions already have

experience with construction prudence and excess capacity reviews for water utilities. A piece of excess capacity trivia: The first excess capacity case in the U.S. Supreme Court—dating back to the turn of the century—was a water case. History does indeed repeat itself.

Several large water systems already have special rate programs for low-income customers. I assure you that more will come, and there will be battles over who should bear the costs of such programs.

Many water systems are converting to monthly meter reading and billing. It's an expensive proposition, but it's a lot easier for many people to pay monthly bills of, say, \$35, than it is to pay a quarterly bill of \$100. That's particularly true if you get paid monthly, as do many people who are retired or otherwise live on fixed incomes.

Demand-side programs and integrated resource planning are finally catching on in the water industry—because there's no choice. There is no better way to cost-effectively meet the requirements of an expanding water system than through a fully integrated planning process that considers the views of all stakeholders and places supply-based and demand-based options on an equal footing.

That's my quick overview of the problem. Water rates are going up. It's not just because of the Safe Drinking Water Act, though that's certainly part of the problem. And, no, you don't just have to sit by and watch it happen. There are things you can do to moderate the rate increases.

You can encourage utilities to adopt sound planning practices. You can implement programs to help low-income consumers. You can give full consideration to demand-side programs. You can engage in thorough reviews of utility planning and construction practices. You can work with NARUC and other national organizations to modify legislation that would affect water consumers.

And, above all, you can stop pretending that it's beyond our control. HITS happens, but it doesn't have to be devastating when it does. As economic regulators, you still have a vitally important role to play in the water industry. I urge you to seize the opportunity so that we can provide all consumers with safe, reliable, and affordable water service for many years to come. Thank you for inviting me to join you today. *

Safe Drinking Water Act Compliance: RATEMAKING IMPLICATIONS

*presented at the
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National Conference of Regulatory Attorneys*

*by Daniel J. Kucera
Chapman and Cutler
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*on behalf of
National Association of Water Companies
Regulatory Law Committee*

In 1746, Benjamin Franklin wrote in his Poor Richard's Almanac,

"When the well is dry, we know the worth of water."

It is helpful, I think, to put the price of water into perspective. In the regulated community, we often see reference to proposed increases in water rates of 25%, 50% or even 100%.

These are big numbers. Or, are they? Let us assume that a typical regulated water utility rate is \$4.00 per 1,000 gallons, and that a 25% increase is proposed to make the rate \$5.00 per 1,000 gallons. Let us further assume that the increase is based upon additional costs resulting from the Safe Drinking Water Act.

At \$4.00 per 1,000 gallon, the rate is \$0.0040 per gallon. That is, water service is provided at a cost of 4/10 of 1¢ per gallon.

For this 4/10 of a penny, a gallon of safe, healthful water is delivered into a house on instant demand.

Compare this cost to any other commodity. For example, the cheapest generic

bottled water retails at about 70¢ per gallon. That price is nearly 200 times the price of the utility water, and does not include the cost of obtaining it from a grocery store. Recently, I stayed at a hotel in New York for a conference. At breakfast, orange juice cost \$6 per 8 oz. glass. At that rate, a gallon would cost \$96. That is 24,000 times the cost of water in my example.

At \$1 per 1,000 gallons, the proposed increase in rates in my example is 1/10 of 1¢ per gallon of water. From a customer's perspective, that proposed increase is very modest indeed.

However, from a utility's perspective, that increase may be indispensable for financial integrity. Without the additional revenue, the utility may not be able to comply with the SDWA.

Thus, the cost impacts of the Safe Drinking Water Act may be severe for a utility and may create a perception of substantial rate impacts. In reality, however, the rate impact for the customer likely will be modest, indeed.

Safe Drinking Water Act and What It Requires Water Utilities To Do

Water utilities are unique because, in addition to their obligations to provide reliable service at adequate quantities and pressure, they must be concerned with the health and aesthetics effects of their water on their customers. Water is the only utility service which is ingested. The federal safe drinking water act, and related state laws, impose rigid requirements upon water utilities to address these health and aesthetics concerns.

The standards under the original SDWA provided for limited concentrations of ten inorganic chemicals, seven organic chemicals, three radionuclides, coliforms, and turbidity that may be present in public water supplies. The 1986 amendments to the Federal Safe Drinking Water Act have imposed serious new risks for water companies. Congress mandated USEPA to develop maximum contaminant levels for 83 new contaminants. In addition, USEPA was required to develop at least 25 additional pri-

mary standards every three years. In addition, USEPA has recently promulgated new criteria for filtration for all surface water supplies and shortly is expected to specify criteria for disinfection and disinfection by-products of all water supplies.

The point is that compliance with the Safe Drinking Water Act is a constantly moving target. What may be satisfactory water quality one year may be a violation the next year, with imposition of millions of dollars of new capital costs to meet new standards.

USEPA has estimated that the annual cost to the water industry to comply with these new standards will be \$2.5 billion per year, and that capital costs will be \$9.5 billion. I might add that the water industry believes that these estimates are understated. Furthermore, a plant upgraded to meet new standards does not assure that the plant will meet new standards promulgated the following year. As a result, repetitive plant upgrades may be needed.

I would like to give one example. USEPA currently is developing a rule on disinfection and disinfection by-products. Concern over the alleged possible carcinogenic effects of certain disinfection by-products is driving this rulemaking. On the other hand, concern about changing established chlorine disinfection treatment with resulting increased risk of water-borne diseases is another factor. It has been estimated that new treatment processes to minimize both risks would cost as much as \$5 billion per year, which is more than all the other existing SDWA rules combined. Moreover, there is so little scientific data available that there is no assurance such new rules would be beneficial or would not actually adversely affect health.

So, in summary, the Safe Drinking Water Act affects water utilities in five major ways:

1. It requires compliance with more standards. It requires U.S. EPA to develop limits for many constituents for which there never previously were limits. In many instances, these constituents may not be even measurable, let alone controllable.
2. It requires compliance with more stringent standards where standards previously existed. U.S. EPA has tended to

be conservative in imposing limits, frequently without adequate research as to the appropriateness of the limits selected.

3. It requires far more monitoring, testing and reporting than previously required.
4. It requires the construction of new facilities and implementation of new processes to achieve higher levels of treatment to meet the new standards.
5. It requires utilities to incur substantial capital costs and the necessity to finance these costs in order to achieve compliance.
6. It requires utilities to incur additional operating costs, for more personnel, chemicals, power, depreciation, etc., in order to achieve compliance.

Many water utilities also have wastewater properties. The Clean Water Act, which applies to discharges from wastewater treatment plants, imposes obligations on wastewater utilities which generally are parallel to those imposed by the Safe Drinking Water Act on water operations.

Perhaps the most dramatic effect of both the Safe Drinking Water Act and the Clean Water Act is that compliance with their requirements generally is not an option—no matter how arbitrary they may be.

As a general proposition, cost-effectiveness is not a relevant component of this form of environmental regulation. Regardless whether the benefits of compliance may be less than the costs, the utility must comply with the applicable requirements.

Sometimes, this fact can lead to absurd results. Let me give you some examples from my own experience.

A water utility takes its water supply from a river which, during certain times of the year, has high levels of nitrates. These nitrates in the river come from runoff and drainage from agricultural land that has been over-fertilized. Such discharge generally is exempt from regulation. Thus, the downstream user of water must bear the burden of contamination caused upstream by agricultural uses of land.

Nitrates affect only babies under the age of six months. However, U.S. EPA will not permit bottled water or other point of use or point of entry solutions. The water utility, and its customers, which number about 7,000, face an estimated capital expenditure of up to \$10 million for treat-

ment or development of an alternative water supply to deal with this admittedly intermittent nitrate problem which potentially affects only a handful of babies at any one time.

In another example, wastewater utility discharges effluent to an intermittent stream. In non-rain periods, there is no flow in the stream, except for the effluent. The stream provides no habitat for aquatic life in the zone of impact. Due to the length of the stream it recovers prior to any downstream portion which could provide habitat. It has no recreational uses. U.S. EPA insists that the utility install a plant upgrade estimated to cost \$4 million in order to meet stringent tertiary treatment standards. An independent study performed by a state agency found that the costs of the upgrade exceed any benefits by as much as 26:1. Nevertheless, the U.S. EPA requires the work to be done.

The point of these examples is that the prudence of the capital expenditure to meet the SDWA cannot be an issue for ratemaking purposes. Whether a plant upgrade is prudent or not, from a cost/benefit standpoint, is irrelevant. It is prudent automatically because U.S. EPA requires it.

How the SDWA Affects Cost of Service and Rates

The SDWA imposes additional risks upon water utilities, both directly and indirectly.

It imposes direct risks in the following ways:

- It imposes a risk of non-compliance with numerous deadlines. These deadlines may be as mundane as due dates for filing of reports or as substantial as completion dates for plant or process upgrades.
- It imposes a risk of failure to take samples and to monitor production and quality in accordance with all requirements. For example, as you may know, a recent EPA rule requires water utilities to sample in customers' houses for lead and copper.
- It imposes a risk of equipment failure, with the resulting possible consequences of pressure failure or quality failure. Generally, failure of plant equipment is not an excuse.

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SDWA, continued

- It imposes a risk that human error will result in a violation of a requirement of the SDWA, as well as a broader impact upon customers. For example, if a plant operator overlooked a faulty gauge on a chlorine tank, and finished water was not adequately chlorinated, the SDWA may be violated and customers may also experience a health effect.
- It imposes a risk of health impacts in ways that may not be readily measurable or defensible. For example, a customer may claim to have acquired an illness due to the presence of the by-products of chlorination.
- It imposes a risk of responsibility for what goes on in a customer's house. It long has been established that a water utility's legal responsibility ends at the property line. However, EPA regulations such as the lead and copper rules seek to make a utility responsible for elevated lead or copper levels caused by plumbing conditions within the home. Another example is provided by the efforts of IEPA to make Illinois utilities responsible for enforcement of local and state plumbing codes and for elimination of cross-connections with customer premises.
- It imposes risk of violation of the SDWA. This risk embodies the cost and burden of litigation, injunctions, court supervision of compliance orders, and penalties. Furthermore, there is an increasing trend toward enforcement of the criminal offense provisions of the SDWA.

The SDWA also imposes many risks upon water utilities in an indirect manner.

- Foremost among such increased risk is the risk involving the financing of plant additions necessary to comply with the SDWA. These plant additions may involve new facilities at existing plants or construction of pipelines to achieve new sources of supply.
- The most likely source of financing for such plant upgrades is debt. However, as debt becomes a larger portion of the capital structure of a water utility, it can be argued that its financial risk increases. In other words, the SDWA has a double-barreled risk impact.
- Moreover, plant upgrades to comply with the SDWA are not revenue pro-

ducing. Thus, as more debt is incurred to finance upgrades, rates must increase to enable a utility to recover the additional debt service.

- On the other hand, smaller water utilities may never get to the first step—the financing of plant upgrades. They face the very likely risk of inability to fund improvements required by the SDWA.
- The smaller utilities, then, face a serious threat of loss of financial integrity. Their only recourse may be the equivalent of a forced sale. To a great extent, the current movement toward consolidation and regionalization of both investor-owned and municipal-owned water and wastewater utilities, and the privatization of municipal-owned utilities, is driven by the economic fall-out from the SDWA.
- It also should be noted that approximately 80% of every dollar of cost of service for a water utility is fixed cost. That means that only the cash flow generated by depreciation expense and rate of return on rate base is available to fund most of the additional costs of service resulting from the SDWA.
- With low depreciation rates, and with relatively low rates of return on equity determined by traditional DCF and risk premium methodologies, there is an inherent risk that rate relief will not be adequate to recover the costs of service associated with the SDWA.
- Finally, a water utility faces the risk that it will be unable to find feasible technology to achieve timely compliance, or where its current supply is not adequate, the risk that it will be unable to find alternative sources of supply.

How does the increased risk from the SDWA affect rate of return? Obviously, there is no formula or calculation that will show how many basis points should be added to a rate of return determined by the traditional DCF or risk premium approaches. On the other hand, obviously a rate of return calculated by these traditional formulas will not reflect the additional risks of the SDWA.

It begs the question to say that the current market price for water utility stock reflects this additional risk. Most water utility stock does not trade in a market. Those few that do trade generally are depressed. If you examine the pay out ratios of the publicly traded water utilities, you

will find that the ratios have generally increased over the past 10 years, reaching in excess of 100% for some companies. I believe that this tells us that water utilities are attempting to prop up, through dividends, something which is not very attractive to investors right now. Increasing pay out ratios, of course, also are counter-productive to the need for funds to meet the SDWA requirements. It also evidences the increased risk resulting from the SDWA impacts.

One thing, I believe, that is clear is that the mechanical midpoint of a range of return is not adequate for water utilities in today's world. It is time to exercise judgment.

To reflect the increased risk, a regulatory commission should do two things:

- Require a water utility to provide evidence in the record of a rate case as to how the SDWA affects it.
- Exercise judgment to reflect that risk by selecting a rate of return on equity in the upper end of the range developed by the traditional formulas; or by moving the whole range upward; or by doing both.

One example of this approach is contained in a recent rate order of the Illinois Commerce Commission for Inter-State Water Company, Docket 94-0270.

The Commission made findings as follows:

"The evidence shows that the Company's extensive infrastructure improvement program (initially discussed in Docket No. 89-0050) is continuing. In 1992, Inter-State completed the first step of that program and placed in service a new water treatment plant, structures and related equipment at a cost of approximately \$13.2 million. The investment in the plant was included in rate base in the Company's last rate proceeding, Docket No. 91-0176. The new plant replaced an aged existing plant, which had numerous significant deficiencies. The new plant was critically needed to meet existing and anticipated federal water quality standards and to insure an adequate supply of safe drinking water."

"The evidence shows that the Company anticipates overall additional investments totaling approximately \$9.5 mil-

lion for the period 1995 through 1998. As an example, in order to comply with applicable federal standards, a new groundwater supply for the community will need to be located. Federal drinking water regulations required the Company to enter into a negotiated consent decree with the Illinois Environmental Protection Agency to lower the nitrate level in the water supply to a level below federal standards by 1997. Management plans to utilize groundwater to dilute surface water to meet the nitrate standard. The project will include groundwater exploration, land purchase, well drilling, installation of pumping equipment, and construction of a transmission main from the wells to the water plant. At present, the estimated cost of the groundwater project is \$4.35 million."

The utility's expert rate of return witness Charles Phillips took this risk into consideration in making his recommendations. As the Commission's order states:

"In arriving at his common equity cost recommendation, Dr. Phillips relied on the DCF analysis, but also recognized the risk premium analysis. In addition, Dr. Phillips took into consideration the unique risks faced by the water industry in general and Inter-State in particular. As Dr. Phillips explained, the entire water industry is faced with large expenditure requirements driven by more stringent state and federal environmental regulations, the need to rebuild aging infrastructure, outside threats to the quality of supply, and increasing competition due to alternate sources of supply. As Dr. Phillips indicated, water utilities do not have the capability to offset these burdens with productivity advances based on technological change. Dr. Phillips also noted that Standard & Poor's recently tightened the criteria that water companies must meet to achieve specific bond ratings. This action indicates that the risk associated with an investment in water utilities is increasing. Dr. Phillips also took into account Inter-State's specific risks as discussed in the Direct Testimony of the Company's witness, Mr. Charles Smith. Dr. Phillips indicated that these risks include the environmen-

tal impacts of the Safe Drinking Water Act, as amended, and vulnerability to reduce usage by large industrial customers (due to increased reliance on private wells, conservation and recycling). Dr. Phillips also noted that Inter-State faces the uncertainty and associated risks of bringing its water supply into compliance with the Illinois Environmental Protection Agency's primary drinking water standard by April 1, 1997."

Ultimately, Dr. Phillips accepted Staff's recommendation, which was close to his, and the Commission concurred.

Rapid Amortization of Plant

Depending upon the particular circumstances, a SDWA compliance program may result in the abrupt retirement of current facilities which have remaining useful lives. For example, to achieve compliance, the most cost-effective program for a water utility may be to abandon its wells and treatment plant and to construct a transmission main to receive bulk water from a new source of supply. This scenario is occurring over and over again in my home state of Illinois.

To assist the water utility in maintaining its financial integrity, regulatory commissions should permit a rapid amortization of the remaining undepreciated original cost of such abandoned plant. Needed cash flow will be received by the utility, and in the long run, customers will benefit by a lower cost of service than if the old plant remains in rate base for years to come.

Deferred Study Costs

The SDWA is not a slam dunk for water utilities. They are not able to look at the regulations and say, "Oh, we will take this piece of equipment off the shelf, install it, and we will be in compliance."

Putting it in different terms, there is no menu from which a utility can select dishes for a happy compliance dinner.

To the contrary, the SDWA typically requires all sorts of studies, pilot plants, surveys, and feasibility analysis before plant decisions can be made, and plant can be designed.

Such costs may be substantial. Regulatory commissions should allow such costs to be recorded in deferred cost accounts. In rate cases, such deferred costs should

be allowed recovery. Either the deferred costs should be amortized to operating expense, with the unamortized balance included in rate base; or they should be included in rate base and ultimately transferred to depreciable plant accounts as projects are completed. In the long run, the first approach is less costly to ratepayers.

Acquisition Adjustments

As I have noted, the SDWA is causing consolidation in the water industry.

Smaller investor-owned water utilities simply cannot afford the SDWA. For many, their only recourse for compliance will be to sell to a larger utility.

The same consequence is true for municipal-owned water utilities. They also cannot afford the SDWA. In increasing numbers, municipal-owned systems are seeking to be privatized by larger, investor-owned utilities in order to achieve compliance with the SDWA.

When such sales and consolidations to achieve compliance with the SDWA are in the public interest—and by definition they are—regulatory commissions should provide incentives to enable these transactions to occur.

The most likely incentive is the allowance of recovery of positive acquisition adjustments in cost of service.

Just because a smaller utility needs to sell, it does not mean that it will sell below its rate base. Most likely, a purchasing utility will have to pay a premium above the seller's rate base. This premium or acquisition adjustment is what enables the deal to go through. However, a purchasing utility will not pay the premium unless it will be able to recover it in cost of service.

Thus, to facilitate action which is in the public interest, a purchasing utility should be allowed to recover the premium paid—the positive acquisition adjustment. Again, the most reasonable scenario would be to amortize the acquisition adjustment "above the line," over a relatively short period, with the unamortized balance included in the rate base.

Several state commissions, including New York, Illinois, Indiana and others in recent decisions or policy statements have recognized the importance of allowing recovery of acquisition adjustments.

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Litigation Expense

In many instances, it may be beneficial for a utility to challenge the development of a particular standard or rule under the SDWA, or the application of the standard or rule to it.

For example, if EPA's position would result in the imposition of costly plant additions which the utility believes are not cost-effective, the utility should be encouraged to assert its belief whenever possible. Likewise, it should be encouraged to defend enforcement cases when valid defenses are available.

To provide an incentive, regulatory commissions should allow the recovery of such litigation costs. The temptation to write such costs off as non-recurring or out of the test year should be resisted. Ratepayers, in the long run, can benefit from a utility's litigation efforts, even if they result only in a compromise position.

Conclusion

More than anything, the SDWA is causing all of us—the regulated and the regulators—to have an attitude adjustment.

No longer can water utilities be viewed as safe regulatory harbors or as regulatory step children. To the contrary, water utilities need the help and guidance of regulatory commissions who grasp the reality that the SDWA means, in simple language—more cost.

There is no way around the fact that the SDWA, as well as the CWA, are imposing higher revenue requirements on water and wastewater utilities.

In perspective, this higher cost for ratepayers makes water even more of a bargain. Most likely, water will still cost less than 1¢ per gallon delivered, on demand, in the house. And, for that cost, customers will receive assurance of an even more reliable and safe supply.

On the other hand, for the water utility, this higher cost may mean the difference between financial failure and success. Since the objective of the SDWA is high quality water, this objective will be defeated if a utility cannot obtain speedy and adequate rate relief to enable it to comply, on a timely basis, with the ever expanding requirements of the SDWA. And, if the well becomes dry, we will know, too late, the true worth of water. ▲

PUC 2000: THE WATER UTILITY INDUSTRY

by Dr. Janice A. Beecher

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Introduction

Although sometimes considered the "stepchild" utility industry with respect to the practice of economic regulation, the water supply industry presents an increasingly significant challenge to the state public utility commissions with jurisdiction in this area. Rising costs, along with structural and regulatory changes in the water sector, will place new demands on utility regulators.

Water supply can be viewed as a particularly essential service because water itself is essential to life and modern sanitation. Water delivery mechanisms are substitutable to some extent (for example, bottled water for drinking or self-supplied water); some uses of water also can be replaced by other activities. However, water itself has no substitutes. Water shortages induce particularly emotional reactions. Importantly, water utilities supply the only utility product that people actually consume.

The strong public health dimension of community water supply cannot be overstated. The consequences of failing to meet drinking water standards, as recent episodes have confirmed, can be deadly. Regulatory authority in the water area extends to the quantity of water withdrawals, the quality of water provided, and the economic behavior of water supply utilities. Regulatory authority also extends to

standards for the disposal of water (that is, wastewater). Finally, the quality and availability of the nation's drinking water are intrinsically related to water pollution policies and practices.

While the water industry may appear small through the lens of the state public utility commissions, it actually is a very large and complex industry. In the United States, nearly forty billion gallons of water per day are withdrawn for public supply purposes. About two-thirds of public supplies come from surface sources; the rest comes from groundwater sources. By one estimate prepared in the middle 1980s, the U.S. water economy, encompassing all public and private facets of water, accounted for annual expenditures exceeding \$77 billion (about 2.5 percent of the gross national product).¹ Much of the economic water sector is at the local level. Of the \$77 billion, \$12 billion were attributed to local water supply operations, \$14 billion were attributed to local wastewater operations, and \$2.5 billion were attributed to other local water management activities. Water supply and wastewater treatment also account for significant demands on the economy in terms of electrical energy and chemicals.

Market and Regulatory Structure

The water industry in the United States is very fragmented and pluralistic, as in

Total U.S. Water Withdrawals and Public Supply Withdrawals in Billions of Gallons Per Day BGPD for 1990

	<u>BGPD</u>	<u>Percent</u>
Total offstream withdrawals	408.0	100%
Public supply	38.5	9%
Rural & domestic livestock	7.9	2%
Irrigation	137.0	34%
Thermoelectric power	195.0	48%
Other industrial use	30.0	7%
Public supply withdrawals	38.5	100%
Domestic	21.9	57%
Commercial	5.9	15%
Public use and losses	5.5	14%
Industrial	5.2	13%
Thermoelectric power	<.1	<1%
Source of public supplies		
Surface water	23.5	61%
Groundwater	15.1	39%

Source: Wayne B. Solley, et al., *Estimated Use of Water in the United States in 1990* (Washington, DC: U.S. Geological Survey, 1993), 22 and 65.

the regulatory process. That is, a large number of diverse water systems are regulated in a variety of ways by the different levels of government. Virtually all water utilities are regulated with respect to federal and state drinking water standards pursuant to the Safe Drinking Water Act (SDWA) and related legislation. Standards related to water pollution and the wastewater industry are derived from the Clean Water Act (CWA). Generally, state drinking water regulators have primacy for implementing SDWA standards, which are

proffered by the U.S. Environmental Protection Agency (EPA). Most water utilities also are subject to environmental regulations governing water withdrawals and pollution control. Thus, a state's primacy agency or another state agency (such as a department of natural resources) may issue permits or other forms of regulatory control. Additionally, many water utilities are subject to regulation by interstate organizations (such as the Delaware River Basin Commission) or intrastate organizations (such as the Florida water manage-

ment districts). Although their authority varies, these regional regulatory bodies may have substantial authority over utility decisionmaking.

The U.S. EPA accounts for nearly 200,000 water systems, although fewer than 60,000 are community water systems. One of many distinguishing features of the U.S. water industry, in comparison to other utility industries, is the prevalence of public ownership. Although the vast majority of water utility customers are

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Approximate Distribution of Water Systems in the United States

	<u>Number</u>
Total water systems	200,000
Total noncommunity systems	142,000
Total community systems	58,000
Commission-regulated systems	11,200
Investor-owned systems	6,700

Source: U.S. Environmental Protection Federal Reporting Data System and 1994 NRRI Survey on Commission Regulation of Water Utilities.

served by municipal water suppliers, a large number of U.S. water systems are privately owned. These privately owned systems typically are much smaller in size than their municipal counterparts. Large or small, investor-owned water systems are regulated by the state public utility commissions because they are monopolistic.

Forty-six states regulate prices and other economic activities of certain water utilities (and wastewater utilities) that meet the criteria for economic regulation, although the scope of jurisdiction varies from state to state. Nebraska began regulating investor-owned water utilities in 1994. Water utilities are not regulated by the regulatory commissions in Georgia, Minnesota, North Dakota, South Dakota, and Washington, D.C. The commissions in these states do not have regulatory programs for water mainly because of the lack of significant investor-owned water utility presence. Also, the geographic dispersion of the population, easily accessible water supplies and the threat of bypass (through individual wells) provide a check on the potential abuses of monopoly power.

Many (but certainly not all) of the commission-regulated water systems are small in size, which poses certain public policy problems. Particularly problematic are the very small systems that were the product of unchecked real estate development and lax local zoning policies. Many of these systems are geographically isolated, which often precludes interconnection with another system. Traditionally, both economic and public health regulators have been very focused on small system viability issues. Water system viability is a "three-legged stool" resting on financial, managerial, and technical capability. All three types of capability can be a problem for small systems. Small utilities lack economies of scale in source development and treatment. They also find it difficult to secure financing for capital projects. Finally, small utilities may be more prone to violations of drinking water regulations, particularly monitoring requirements.

Despite the problems of small systems, three trends are apparent. First is the diminishing number of systems in the smallest size categories due to population growth, as well as mergers and acquisitions. Second is the more effective preven-

tion of the emergence of new small systems through more stringent certification and permitting policies. Third is the apparent improvement in the viability of many existing water systems, due largely to the collective efforts of public utility commissions and state drinking water primacy agencies in the form of ratemaking, financing, and technical assistance efforts.

Modern policies emphasize the importance of establishing and maintaining water systems for which the population served can support the cost of water service. The emphasis on water system viability at the federal, state and local levels will make it harder for providers to get operating certificates and special financing. Potential suppliers face considerable barriers to market entry, including the rising cost of meeting drinking water standards and acquiring water supply permits. In some states, growth management policies are calling for consolidation of water supply through interconnection with existing systems. All of these institutional factors are combining to gradually reduce the number of water systems in the United States, although a very large number of systems remain.

Water Systems Regulated by the State Public Utility Commissions, 1994

	<u>Number</u>	<u>Percent</u>
Water systems		
Investor-owned	6,650	59%
Municipal	1,680	15%
Water districts	1,270	11%
Cooperatives/homeowners	970	9%
Others	650	6%
Total water systems	11,200	100%
Wastewater systems		
Investor owned	2,450	74%
Municipal	630	19%
Water districts	190	6%
Cooperatives/homeowners	20	1%
Others	10	<1%
Total wastewater systems	3,300	100%

Source: 1994 NRRI Survey on Commission Regulation of Water Utilities.

Typical Residential Water Use in Gallons Per Capita Per Day (GPCD)

	<u>GPCD</u>	<u>Percent</u>
Total water use	123.3	100%
Indoor use	78.2	63%
Outdoor use	45.1	37%
Indoor water use	78.2	100%
Toilets	27.4	35%
Laundry	17.2	22%
Showers	14.1	18%
Faucets	10.2	13%
Baths	7.8	10%
Dishwashing	1.6	2%

Source: William O. Maddaus, *Water Conservation* (Denver, CO: American Water Works Association, 1987), 22.

The market structure and regulatory structure of the water industry are evolving in significant ways. Through mergers and acquisitions (including regulatory induced takeovers of small systems), consolidation is occurring slowly but surely. In addition, much attention is being paid to the potential development of regional water supply and treatment. An increasing interest in privatization also is apparent. Regulation of the water industry remains very pluralistic, and sometimes very inefficient. Different regulators sometimes send utilities competing signals about their performance. The potential for conflict between health regulators and economic regulators is still a relevant concern. Memoranda of understanding and other formal and informal methods of interagency coordination are overcoming these institutional barriers to more effective regulation of the industry. Modern information technologies, such as geographic information systems that incorpo-

rate market and regulatory data, would be extremely beneficial for the purposes of coordinated state regulation.

Demand Characteristics

Water supply utilities are designed to meet the basic parameters of water demand. For many water utilities, domestic or residential demand takes the lion's share of total water demand. For residential customers, most of the quantity of water demanded is for indoor use, which is considered less discretionary and a relatively price-inelastic consumer good. In other words, while changes in water prices affect water use, the magnitude of this effect may not be substantial. By comparison, industrial water use is considered more responsive to changes in price. Industrial customers may be more likely to seek cost-effective alternatives (such as efficiency improvements or even self-supply) as the cost of water rises. For water utilities, this raises the possibility of system

bypass, stranded investment, and the need for remaining customers to cover fixed costs. Some water utilities offer economic development rates (which they believe to be cost justified) to retain large-volume customers.

The peaking characteristics of water demand strongly influence the design of water systems and can limit the potential for conservation savings in certain areas. Raw water storage facilities, such as reservoirs, generally are designed to meet average annual demand; transmission and treatment facilities, as well as major feeder mains, pumping stations, and local storage facilities, are designed to meet maximum-hour demand, or maximum-day demand plus fire protection flow requirements, whichever is greatest.² Precipitation rates can affect both the supply and demand for water. Traditional water supply planning placed a high emphasis on supply reliability, particularly for mitigat-

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ing the impact of droughts. Certain areas of the country are now experiencing nearly critical constraints on readily available water supplies. Some previously far-fetched water supply options, such as desalinization, are being more seriously considered because the cost of conventional supply options is increasing and the cost of some unconventional options is decreasing.

Demand management for the water sector is being recognized as an increasingly cost-effective resource option in comparison to conventional water supply options. Water conservation can be especially helpful in managing seasonal variations in demand and long-term growth in demand. Although conservation generally will not allow utilities to significantly downsize their existing operations, it can be instrumental in forestalling the expansion of source-of-supply and treatment capacity,

and calibrating future operations to reflect demand patterns modified by permanent efficiency improvements. Demand management and conservation-oriented planning and pricing are gaining increasing importance in the water sector, although far more aggressive urban water conservation programs can be found in the municipal sector than in the private sector. Some large municipal systems (such as New York, Boston, and San Diego) are facing severe resource constraints and already recognize demand management as a least-cost alternative for meeting demand.

Cost Characteristics

Drinking water is a value-added commodity. The value of publicly supplied water derives almost entirely from the cost of withdrawal, treatment, and distribution of water by vertically integrated utility monopolies. Water utilities remain one of the more tried and true monopolies in

terms of basic economic characteristics. In general, water service can be provided efficiently by a vertically integrated supplier; two or more suppliers (or redundant distribution systems) in the same service area would greatly increase costs and rates. The technology of water supply clearly demonstrates economies of scale, meaning that unit average costs decrease with the quantity of water provided. The prevalence of many small utilities undermines the industries' overall efficiency.

Even in comparison to other fixed utilities, water utilities require substantial investment in fixed assets relative to the variable costs of production (including the cost of raw water, energy, and treatment chemicals). Using the standard of capital investment per revenue dollar, the water supply is among the most capital-intensive of all utility sectors. Capital investment in water supply mainly is a function of the need to establish production capacity;

Ratio of Utility Plant to Operating Revenues for Major Public Utilities

	<u>Ratio</u>
Telecommunications	
AT&T	.7
Local exchange carriers	2.8
Telegraph carriers	2.5
Natural Gas	
Distribution	1.6
Transmission	2.4
Integrated companies	1.7
Combination companies	1.5
Total investor-owned	1.9
Electricity	
Major investor-owned	2.9
Publicly owned generating	3.9
Water Supply	
Major investor-owned (NAWC)	3.9

Source: Janice A. Beecher, et al., *Meeting Water Utility Revenue Requirements* (Columbus, OH: The National Regulatory Research Institute, 1993), 5.

maintain a complex storage, transmission, and distribution network; and meet both fire-protection specifications and peak demands. In general, the water supply industry has high fixed costs and low capital-turnover rates. However, the capital intensity of the water supply industry also can be explained by the industry's relatively low variable (operating) costs, which translate into relatively low operating revenues.

Investments in water supply tend to be large and indivisible, the "lumpiness" feature that also is typical of other public utility industries. Many of these capital investments including treatment plants and the transmission and distribution infrastructure, may have very long service lives. Because capacity is added in large increments, there may be periods of underutilization, which can pose significant financial problems in terms of cost recovery. Of course, the utility with plentiful capacity is in a good position to accommodate demand growth, if indeed growth is on the horizon. In reality, many water utilities are not well positioned to deal with demand growth (through surplus capacity) or the other additional cost pressures (through surplus financial resources). The potential result is cost shock for the utility and rate shock for customers.

Primary Cost Drivers

Water supply is a rising-cost industry. Water supply utilities, and their regulators at the federal, state, and local levels, are increasingly aware of the water supply industry's changing revenue requirements. Three key forces affecting the industry's costs are (1) the need to comply with regulatory provisions of the Safe Drinking Water Act (SDWA), (2) the need to replace and upgrade an aging water delivery infrastructure, and (3) the need to meet population growth and economic development. In addition, water utilities face a variety of secondary cost forces. These include the sometimes high cost of borrowing to finance capital projects (especially for small systems) and the shift to nonsubsidized, self-sustaining operations (especially for publicly owned systems).

The concurrent and mutually reinforcing impact of these forces on many utilities presents a substantial pressure on both capital and operating costs, a pressure not previously experienced by the water supply industry. However, the nature of these costs should not be taken for granted but closely scrutinized. Moreover, the water supply industry must be held accountable for making prudent decisions in response to its changing cost profile. The industry must be able to fully justify

the use of alternative approaches to meeting revenue requirements (such as automatic adjustment mechanisms and pass-throughs, as well as cost allocation and rate design methods). Water utility regulators should be open to the consideration of alternatives but vigilant about how these methods are applied. Regulators will want to be especially cautious about affecting the incentives that determine whether utility costs are effectively managed. Thus, the industry perspective on rising costs and how to address them should be tempered by a reasoned regulatory perspective.

Each of the three sources of cost pressure has distinctive relevance. No unique factor, including federal drinking water quality regulations, can be singled out as the principal determinant of the industry's financial situation. Despite the political fervor over "unfunded mandates," regulatory compliance costs associated with the SDWA (which are manifested primarily in the water treatment area) pale somewhat in comparison to projected capital and operating costs associated with infrastructure improvement and demand growth needs.

Meeting additional revenue requirements in the already capital-intensive water supply industry depends on the

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Estimated Distribution of Required Water Utility Expenditures by Cost Driver and Affected Facilities

	Percentage
Type of cost driver	
SDWA compliance	8 to 13%
Deferred infrastructure	37 to 49%
Meeting growth	39 to 55%
Affected facilities	
Source and transmission	14 to 21%
Distribution system	29 to 48%
Water treatment	24 to 57%

Source: Wade Miller Associates, Inc., *The Nation's Public Works: Report on Water Supply*. (Washington, DC: National Council on Public Works Improvement, 1987), 42.

Average Operation and Maintenance Expenditures for NAWC Investor-Owned Water Utilities in 1991

	<u>Average Expenses</u>	<u>Percent</u>
Production	\$3,738,930	31.2%
Administrative and general	3,377,746	28.2%
Transmission and distribution	2,254,609	18.8%
Customer accounting	1,397,040	11.7%
Purification	1,290,213	10.8%
Total	\$11,972,771	100.0%

Source: Authors' calculations based on *National Association of Water Companies Financial Data for 1991* (diskette version).

optimal integration of financing and ratemaking strategies. A number of strategies are available, some conventional, some unconventional, and others untried by water supply utilities. Options available to some utilities may not be applicable to others. Regulation of investor-owned systems by state public utility commissions superimposes an oversight and ratemaking structure that may affect the appropriateness of certain options for jurisdictional utilities. For all types of utilities, regardless of their ownership, the emphasis on least-cost financing and ratemaking options is growing.

Importantly, not all forces affecting the water supply industry contribute to the upward pressure on costs and revenue requirements. Some forces have the potential to exert significant downward pressure on costs. First, technological innovations in water treatment and other aspects of utility operations can be expected. Second, water utilities can adopt efficiency improvements to reduce waste, conserve resources, and lower production costs (such as energy costs for pumping). Third, water system consolidation can facilitate the achievement of economies of scale in source development, water treatment, and utility management operations. Fourth, market forces can lower costs by fostering competition for contracts and services among vendors. Fifth, strategic management by

water utilities can yield savings in such areas as financing, administration, and purchasing. Finally, integrated resource planning by water utilities, including a balanced consideration of supply-management and demand-management options, can promote least-cost strategies.

Pricing and Affordability

Water pricing generally reflects the basic cost characteristics of the industry. Water rates generally take the form of a fixed charge that does not vary with usage plus a variable charge that does vary with usage. In water utility rate design, regulatory analysts sometimes become frustrated by the fact that traditional cost-of-service principles can lead to very high fixed charges and very low variable charges for water utilities. This problem can seem to undermine the price-signal purpose of the rate and run contrary to conservation goals. When utility costs are shifted from fixed to variable charges, as may occur with conservation-oriented pricing, revenues can become less stable and predictable.

Water utilities are facing some considerable pressure to reexamine their cost allocation and rate design practices. Many publicly owned systems can no longer rely on funding sources other than user fees. All types of water utilities are beginning to adopt rate structures that recognize

modern pricing principles (such as marginal-cost pricing) and the role of pricing in promoting conservation. The use of decreasing-block rates has declined in all but the midwestern region of the country, where water supplies are considered plentiful.³ Some utilities are using seasonal or increasing-block rates as part of their demand-management strategies. Finally, the interest in other rate structures, such as lifeline rates, also is mounting.

For many water customers, the affordability of water service is a growing problem. The problem of affordability affects customers in terms of increased arrearages, late payments, disconnection notices, and actual service terminations. Affordability affects utilities in terms of expenses associated with credit, collection, and disconnection activities; revenue stability and working capital needs; and bad debt or uncollectible accounts that other customers must cover. Other ramifications of the affordability issue also are becoming apparent. If a customer base cannot support the cost of water service, potential lenders may be concerned about the utility's financial viability and ability to meet debt obligations. Moreover, service disconnections can present a public relations nightmare for utilities, particularly because they involve essential services. Increasingly, problems of bad debt also extend to nonresidential utility cus-

tomers. Financial distress and bankruptcies in the commercial and industrial sectors can leave utilities holding the bag. However, the larger issue of affordability is primarily a concern with respect to low-income residential consumers.

Mounting evidence suggests that rising water prices exceed both average growth in income and the general rate of price increases.⁴ For low-income customers, who have little choice but to buy service from the local utility, paying more for basic water service means going without less essential and more discretionary products and services. Thus, rising water prices can contribute to a deterioration in the quality of life for low-income utility customers.

Changing Risks and Returns

The increasing capital and operating requirements of the water utility industry pose the question of whether the industry is becoming more risky and whether increased risk will be translated into higher costs of equity capital for investor-owned water utilities and higher costs of debt capital for government-owned water utilities. In the context of utility regulation, the perception of higher risk translates into higher authorized rates of return. As a general rule, public utilities face three principal sources of risk: business risk, financial risk, and regulatory risk.

Understandably, representatives of investor-owned water utilities believe that

their industry is becoming more risky. The argument for increased business and financial risk for the industry flows from several factors associated with the three major cost pressures on the industry. First, much uncertainty continues to surround reauthorization and implementation of the SDWA, as well as other federal and state environmental mandates; the ultimate compliance cost impacts still are unknown. Second, even more uncertainty exists over the actual condition of the water supply infrastructure and what improvements will be necessary to bring it up to standard. Third, considerable uncertainty regarding future demand exists given the potential for demand elasticity effects from large rate increases. Uncertainty also surrounds the availability and reliability of water supplies for meeting demand growth. All of these factors can complicate forecasting and planning.

The water utility industry also faces regulatory risk, which indeed may be the kind of risk that concerns its representatives the most. Like most forms of risk, regulatory risk is about uncertainty, in this case the uncertainty associated with the treatment of costs by regulatory agencies. Regulatory risk accompanies not only SDWA costs but all water utility costs, including those associated with infrastructure improvement and demand growth. Regulatory risk is manifested in various approval processes, prudence and reasonableness reviews, and general regulatory

lag and delays. The prospect of rate-base exclusions and revenue-requirement disallowances during periods of rising costs is especially disconcerting to utility managers. The water supply industry openly strives to reduce regulatory risk through the establishment of certain and expeditious cost recovery mechanisms.

From an economic regulatory standpoint, the SDWA may not be the source of risk it sometimes is portrayed to be. In essence, the states are preempted by federal drinking water regulations. The implications of preemption for economic regulators are significant. In fact, mandated investments are in some ways less risky than other expenditures in the context of utility regulation. It might even be asserted that the SDWA actually provides water utilities with a unique opportunity to expand the rate base with relatively little regulatory risk. Moreover, the cost impacts associated with the initial scope of the SDWA are gradually becoming more known and predictable. The argument that these costs pose special regulatory risks should be viewed with caution. In the long term, infrastructure improvement and meeting demand growth may prove to be far riskier for the water supply industry.

Competitive Opportunities

The rationale for regulating private-sector activities is intrinsically related to the

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Global Comparison of Economic Regulation

United States	Ratebase/rate-of-return regulation by state public utility commissions
Great Britain	Incentive-oriented price caps by a single-administrator agency
France	Municipal contracts with reviews, indexing, and negotiations
Chile	Yardstick competition reviewed by a national tariff board
Argentina	Price-cap agency regulation with operational contracts and long-term planning

Source: World Bank (Workshop, 1994).

concept of market failure. The monopolistic character of public utilities undermines opportunities for competition, leaving public ownership and regulation as the usual alternatives. In some important respects, publicly and privately-owned water utilities compete for market shares. At any given time, some water utilities are being privatized; others are being transferred from private to public ownership.

Water supply technology and cost characteristics greatly limit opportunities for many forms of competition. Water is supplied almost exclusively through vertically integrated public utilities. That is, a single entity controls all of the assets necessary to supply consumers with water (from the source-of-supply to the delivery process). The economies of scale in water supply development and in treatment are substantial. Achieving economies of scale in water treatment are more important than even because of rising treatment costs. More stringent drinking water standards place a disproportionate burden on small systems. In addition to industry cost characteristics, institutional forces can limit competition. The concept of municipal "water works" invokes a tradition of public-sector orientation, which can present political obstacles to both competition and privatization.

Nonetheless, forces of competition are affecting the water industry. Water systems in many parts of the world are run by national governments, making them very large public utility monopolies. In the past decade, however, many of these systems have been privatized. The reasons for privatization vary from country to country, but the key reasons seem to be ideological and partisan political movements, governmental reinvention and reform, the need to reduce government debt, and the desire to attract private capital for building utility infrastructures. Great Britain, France, and Latin America stand out in the privatization movement, although examples can be found in virtually every corner of the world. Rather quickly, some of the newly privatized utility monopolies have become effective global competitors. French and British firms, in particular, have an increasing presence in other parts of Europe, in Latin America, and in the United States. In some cases, these international firms are

leading the way to competition by marketing operation and maintenance services; in other cases, they are actively seeking to assume ownership and control of water utilities.

While global competition in the water supply industry is increasingly evident, U.S. firms are relatively new entrants on the global scene. At this time, many of the large engineering firms are more active competitors for contract maintenance and operations agreements with government entities both here and abroad. As U.S. investor-owned water utilities join the competition, regulatory issues related to holding company organizations, affiliated interests, and protecting core customers will arise. In general, competition and privatization are expected to have positive economic benefits for the water industry and ancillary industries.

Evolution of the Regulatory Bargain

The rationale for economic regulation of water utilities is not unlike that for regulating other public utility monopolies. Regulation is seen as necessary and in the public interest when a firm provides an essential service and has the properties of a natural monopoly. Water utilities satisfy these criteria. While it is popular to regard state regulation as a substitute for competition, regulation of a private or investor-owned utility can just as well be viewed as a substitute for public ownership. This reality is possibly more apparent in the water sector than the other utility sector.

In regulating water utilities, the appropriate scope of regulation is the central issue. In exercising regulatory authority, policymakers must balance the benefits of regulation in controlling monopoly abuses and promoting ratepayer equity, with the administrative and economic costs of regulation. Generally, the commissions recognize that methods of oversight appropriate for larger utilities may not be appropriate for smaller utilities. Because so many regulated water systems are small, the commissions have developed a variety of regulatory techniques specifically for the water industry. These include streamlining methods such as simplified procedures for rate filings and reports. In addition, state laws and commission rules often exempt very small systems from

regulation based on size criteria related to the number of customers served or the magnitude of utility revenues. Geopolitical criteria are sometimes used for exemption as well. For example, municipalities usually are regulated if they serve outside of municipal boundaries. Finally, a few state commissions defer to local governing bodies to set rates for certain systems but review cases on appeal.

In practice, the states have limited the regulation of the water industry in some important respects. Although the states have strived to simplify water utility regulation, few have actually surrendered jurisdiction for water utilities. Instead, the states have used selective criteria to exempt some utilities from regulation or certain aspects of regulation as long as the specified criteria are met. A change in circumstance, such as an increase in the number of regulated customers or a petition by ratepayers, can bring a water system back into the regulatory process.

For the past few decades, economic regulators have sought regulatory alternatives for their jurisdictional utilities, including their water utilities. The large number of utilities compounds the cost of regulating the water industry, and these costs may be rising. The cost of regulation is especially true for state agencies with primacy for enforcing federal drinking water standards, but it is also true for the state public utility commissions. The commissions have jurisdiction for thousands of water systems and they face thousands of water-related proceedings each year. The relatively high caseload associated with water regulation is sometimes viewed as a misallocation of commission resources.

Critics of regulation sometimes argue that too many regulatory resources are devoted to the water sector relative to the apparent economic impact of the sector in comparison to the other major regulated industries. A competing view, however, is that even smaller utilities have a degree of monopoly power over their customers and that every utility customer deserves consumer protection. Moreover, the cost of regulation is usually evaluated in absolute dollar terms, not in terms of its actual cost-effectiveness from a societal standpoint. Thus, while costly, the benefits of water utility regulation for ratepayers should not be understated or ignored.

One option for changing the character of governmental oversight of the water utility industry is for the state public utility commissions to relinquish their regulatory responsibility. Exemptions can be viewed as a form of conditional and temporary deregulation. However, deregulation can be a rather ambiguous concept. Regulated private utilities can either become unregulated private utilities or publicly owned utilities. Only utilities that remain privately owned are truly deregulated. In the case of municipal ownership, state regulation is replaced by local governmental control. Deregulation affects utilities, ratepayers, and regulatory agencies. The market for water service is not competitive. Thus, the market does not provide an effective check on monopoly power. There is a strong tendency to maintain the status quo in regulation because the uncertainty surrounding deregulation is substantial. Areas that would be affected by deregulation include: consumer protection, compliance with standards, cost control, financial viability, industry restructuring, resource planning, and institutional roles and responsibilities. In analyzing deregulation as a policy option, each of these areas should be carefully considered.

Today's institutional climate may be especially suitable for examining alternative regulatory approaches. The regulation of water utilities can be made more cost-effective and more effective overall in achieving basic public policy goals. Even in the generally monopolistic area of water supply, a keen interest in incentive regulation is emerging. One reason for this interest is the emergence of alternatives to ratebase/rate-of-return regulation in the global community. In reality, the commissions already use certain kinds of performance benchmarking in regulating water utilities. Examples include the use of customer complaints to trigger regulatory intervention and the use of industry-based cost-indexing methods to set rates. A trend toward more incentive-based models of regulation is expected. The various forms of privatization may present additional challenges. For example, the commissions could eventually serve as a court of appeals to review municipal privatization contracts. Finally, alternative dispute resolution, whereby issues are resolved outside of the formal regulatory process,

may become an important regulatory tool in the increasingly conflictual realm of water regulation.

Conclusions

In sum, public water supply is considered an essential service and water utilities traditionally have been viewed as natural monopolies. These realities are not likely to change. Given these monopoly characteristics, regulatory protection of captive or core customers is a salient concern. It is a concern made more salient by the fact that the cost of providing water is rising and the reality that the demand for water is relatively price-inelastic. It follows that economic regulation of water utility monopolies to protect ratepayers and promote the public interest is a legitimate concern of the state.

This is not to say that the economic regulation of the water supply industry cannot or will not evolve in significant ways over the coming decades. Rising costs, industry restructuring, and emerg-

ing competition will pose special challenges for economic regulators. The role of the state public utility commissions will have continuing importance in meeting these challenges and setting standards of analysis and performance not only for the regulated sector but for the water industry at large.

¹Neil S. Crigg, *Water Resources Planning* (New York: McGraw-Hill, 1985), 54.

²F. Pierce Linaweaver and John C. Geyer, "Use of Peak Demands in Determination of Residential Rates," *American Water Works Association Journal* 56, no. 4 (April 1963); and Charles W. Howe and F. Pierce Linaweaver, "The Impact of Price on Residential Water Demand and its Relationship to System Design and Price Structure," *Water Resources Research* 3 (First Quarter 1967): 13-32.

³Ellen M. Duke and Angela C. Montoya, "Trends in Water Pricing: Results of Ernst & Young's National Rate Survey," *Journal American Water Works Association* 85 (May 1993): 53-61.

⁴Scott J. Rubin, "Are Water Rates Becoming Unaffordable?" *American Water Works Association Journal* 86, no. 2 (February 1994): 79.

Water Issues for the Year 2000

- Setting and meeting environmental standards
- Infrastructure replacement and improvement
- Demand growth and resource constraints
- Rising prices, affordability, and consumer protection
- Financial viability and related small-system issues
- Changing risk profile of the water industry
- Economic efficiency and marginal-cost pricing
- Structural change, regionalization, and consolidation
- Privatization of water and wastewater services
- Water conservation and efficiency technologies
- Least-cost and integrated resource planning
- Performance benchmarks for water supply utilities

Source: Author's construct.

Water's River of Change

C. Meyrick Payne is a senior partner in the New York-based consulting firm of Management Practice Inc. (MPI). As a twenty-five year commentator on various service industries, he draws analogies between upcoming changes in the water industry and those which have already occurred in banking and telecommunications.

Twenty years ago there were 14,262 banks in the United States. Every community had at least one bank. Today there are about 9,000 banks. Think of the sweeping changes that have occurred: national banking, ATMs, interest on checking, sale of mutual funds, telephone access, the loss of differentiation between savings and commercial banks, the merger of Chemical and Manufacturers Hanover, and the emergence of Nationsbank and Fleet. Twenty years from now the water industry will have experienced a similar revolution.

Three great changes are coming (see table): (1) re-engineering, (2) consolidation and (3) privatization. These three apply equally well to both the investor-owned and municipal sectors of the industry. The customer, the only person who ultimately matters, does not care about how the industry chooses to organize itself. What matters is product quality, service and rates.

Re-engineering America's water companies has only just begun. Over the past

ten years, the average number of customers per employee is estimated to have improved only 6 percent, a much smaller increase than the 16 percent realized in the banking industry, or the 22 percent obtained in the telecommunications industry.

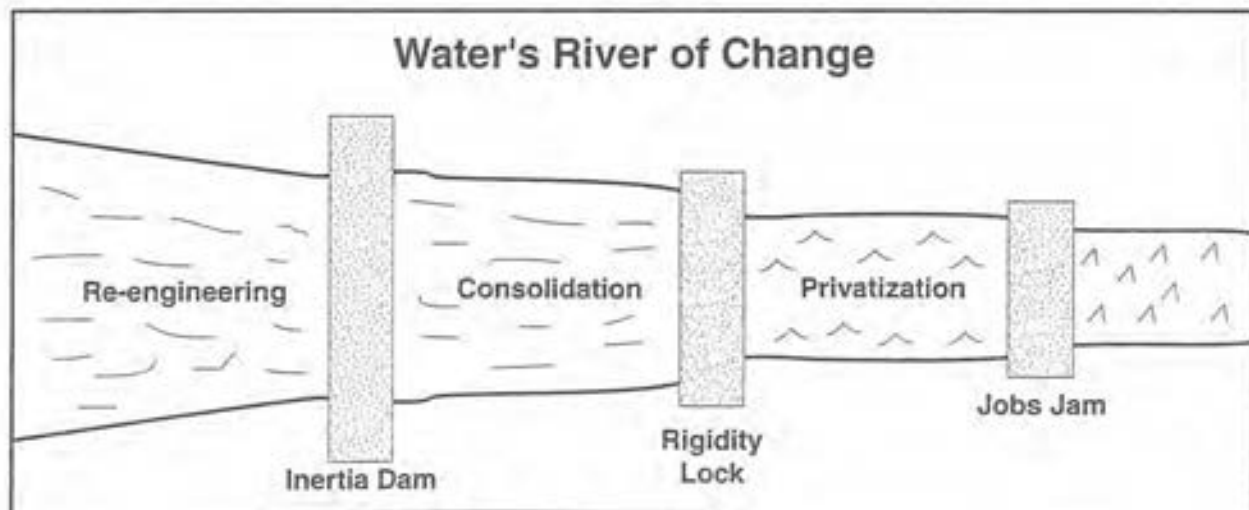
While significant improvements have been made in the quality of drinking water, management still needs to be flattened, decisions delegated, technology adopted, and productivity improved. The key is to better utilize computers, to empower better trained managers, and to be tougher about under-utilized assets, particularly employees.

The impediment to re-engineering is inertia, which may take the form of regulators' unwillingness to allow a fair rate of return, management's reluctance to adopt new technology, labor's insistence on antiquated work rules, or a reluctance of all parties to eliminate overstaffing and waste.

Consolidation is both inevitable and

desirable. There are too many small water systems, both investor-owned and municipal. Of the 58,000 water systems, only 2.5 per cent serve over 25,000 people; many small systems are, or will shortly become, non-viable. Just like community banks, the industry needs to consolidate into larger units where a critical mass of expertise can be sustained and a large customer base can absorb the cost of infrastructure improvement. The Safe Drinking Water Act will push consolidation along the way, but the driving force will be consumerism and the media. In one industry survey after another, consumers have signaled their desire for better service and more involvement in the trade-offs faced by the industry.

The impediment to consolidation is frequently rigidity of thought of the water utility owners, their executives and municipal managers. Owners are not yet ready to consolidate their holdings into larger, more economically viable organizations. Managers, both municipal and



private, are not yet willing to face the loss of power which they perceive will result from consolidation.

When the purchase price is high enough or the operating costs of small systems tolerable, owners and managers will simply seize the economies of scale.

Privatization is happening in many countries, but not yet to a material degree in the U.S. With America's distribution systems built and water universally available, the time has come to focus on the most effective way to improve the infrastructure and to streamline operations.

Competition is usually the most effective way to improve efficiency. The issue is, what is the best way to introduce competition into our water systems, particularly the municipals. Operating contracts

are far more likely to succeed than the sale of assets because the US tax laws convey many structural advantages to municipal ownership. On the other hand, competitive bidding to design, install and operate America's water and waste facilities is eminently possible. The process has been going on for years, and has recently received a boost from Mayors such as Giuliani of New York and Goldsmith of Indianapolis. In 1992 over 400 separate contracts were let for about \$450 million. By 1998 industry sources estimate that there will be over 800 outsourcing contracts for water and waste water.

The impediment to privatization is fear over job-loss. City managers and union representatives are wary of the loss of jobs which may result from contract bidding

among for-profit companies, each competitively driving for productivity improvements.

Once the reality of taxes, needlessly high to subsidize water rates or feather-bed municipal jobs, becomes conspicuous to voters, mayors and city managers will choose political goodwill over a few jobs in the water department.

The river ahead is rocky, but the pressure to overcome each obstruction is building. The industry has the technical capability and the ability to raise the necessary finances. What may be lacking is the willingness to overcome inertia, abandon rigid thinking, and welcome the substitution of technology for jobs.

“Flushed with Pride” Toilet Retrofit Project Begins in Northern California to Benefit Low-Income Community

The California water industry has hit upon an efficient way to both boost water conservation and provide practical training and work experience in low-income areas. The “Flushed with Pride” program, which has already proven successful in Southern California, is now making a splash in Bay Point, which is the first Bay Area community to take the plunge. During the six-week project which began in May, residents from a local homeless recovery shelter installed approximately 400 Ultra-Low-Flush Toilets (ULFTs) in Bay Point.

The program is co-sponsored by California Cities Water (a local affiliate of the Southern California Water Company),

which is covering training and administration costs, and Contra Costa Water District (CCWD), which provides \$75 towards the cost of each of the 400 free Ultra Low Flush Toilets (ULFTs). CTSI Corporation, which developed the original “Flushed with Pride” program in Southern California, is managing the Bay Point program.

The people power is being provided by the Restoration City Missions, the largest family homeless recovery shelter in Contra Costa County. In early May, 12 participants from the Restoration City Missions received free toilet installation training by Bella Vista Plumbing at Local 159 in Martinez. The Restoration City

Missions participants work in teams to remove and install toilets under the supervision of professional staff.

At the completion of the installation project, the Restoration City Missions will receive \$16,000 (\$40 per toilet) as compensation for the toilet installations. The money will help sustain programs for the County's homeless community. Remaining project funds will cover trainees' educational scholarships and be applied towards rent for permanent housing.

In the Los Angeles and San Diego metropolitan areas, the “Flushed with Pride” program has enabled 80 participants from local community based organizations to

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"Flushed With Pride," continued distribute approximately 250,000 ULFTs to low-income residents. The program was first launched in mid-1992 by CTSI Corporation for the Metropolitan Water District of Southern California.

Water agency sponsors in Southern California have found that the program helped reduce the cost of ULFT delivery and marketing by several million dollars since the inception of the program. A portion of that savings, \$4.4 million dollars, was returned to Southern California community groups. This money made it possible to develop the 80 jobs that support the ULFT distribution program, as well as providing additional funds for the groups' programs, including after-school care, immunization, micro-business loans, educational scholarships, and community clean-up and service programs. Direct benefits to past "graduates" of the program have included skills assessment, job shadowing, and employment opportunities.

So, how did this program come about? "It was a meeting of the minds—having the right people in the right place at the right time," according to Kirk Brewer, water conservation manager for Southern California Water Company who's local affiliate, California Cities Water Company serves the Bay Point area. In late April, Brewer led a tour of several low-income housing sites for possible ULFT retrofits with several water conservation companies. One of the sites was Restoration City Missions, the largest family homeless shelter in Contra Costa County.

In talking with Jermon Knott, executive director of the shelter, Ann-Marie Mitroff of CTSI Corporation, learned that many of the current residents at the shelter had many of the skills needed to distribute and install toilets. "Why not have the Mission residents be trained to install toilets for your program?" Mitroff asked SCWC's Brewer. "Why not indeed!" responded Brewer, "It's a true win-win for the utility and supports our local community in Bay Point."

Thus, a project and partnership was born.

On May 1, 12 eager trainees, both men and women, began the week-long training session, conducted by CTSI Corporation, that included an overview of California water history, water conservation, cus-

tomers service, role-playing, safety, recycling of old toilets, warehouse and inventory, and toilet installation. A local Bay Point Union plumber, Dave Custudio of Belle Vista Plumbing, provided the detailed toilet installation training at the Martinez Local 159 Plumbers and Steamfitters union training center. With years of experience, Custudio provided valuable hands-on information to be sure there are no mishaps in installation.

For Restoration City Missions, this program goes hand-in-hand with their mission—helping people climb out of the homeless cycle by providing training, support, and hope. Not only will the trainees gain useful experience and job skills, but Mission will be able to use the funds to provide for the needed counseling support services plus the daily needs of the shelter's residents. In addition, project funds will also cover trainees' educational scholarships and be applied towards rent for permanent housing. For example, one of the women trainees is in the Adult Education Program's Women in Non-Traditional Trades apprenticeship program. The hands-on experience that the "Flushed With Pride" installation program is providing her as a part of the apprenticeship program is extremely valuable.

The mission has a multi-phase recovery program, lasting from 3 to 9 months on the average that includes counseling, daily classroom sessions, 12 Step Program for those in need, assistance with transition to housing and/or work programs, and a community service program. In 1994, the Mission provided 21,000 nightly bed spaces for men, women and children in their program. In turn, the Mission residents provided over 32,000 hours of community service.

On May 8, the "Flushed With Pride" Mission team began toilet installations in the community, working in teams to remove and install toilets under the supervision of professional staff. They also install low-flow showerheads, faucet aerators, and provide conservation information to the residents. At projects where there is landscaping, they will also give outdoor watering tips.

California Cities Water is proud to have provided quality water services to the community of Bay Point since 1964. California Cities Water is a part of Southern

California Water Company.

Contra Costa Water District serves approximately 400,000 retail and wholesale customers in Central and Eastern Contra Costa County. In 1994, CCWD launched a rebate program, providing \$75 rebates to residential customers who replaced high-water-use toilets with approved Ultra Low Flush Toilets.

Ultra Low Flush Toilets, which use only 1.6 gallons of water (compared to approximately seven gallons of water used by older toilets), can save an average of over 8,000 gallons per year in a typical household.

While the 400 toilets in Bay Point is a small start, this type of service delivery with the use of community-based organization, such as Restoration City Missions, is the start of a potentially powerful model for Northern California water agencies. ♦

Welcome to . . .

Our Newest Member Companies

South Shore Water Works Co.
South Shore, KY

Summit Management and
Utilities, Inc.
Lake Harmony, PA

Our Newest Associate Members

Greg Foley
Kleinwort Benson
New York, NY

Ayman Hassan
Philip Utilities Management
Corp.
Hamilton, Ontario

Robert McCarthy
Memtec America Corp.
Timonium, MD

Joseph Starnes
Ogden Martin Systems of
Huntsville, Inc.
Huntsville, AL

Executive Director's Report

by James B. Groff

In recognition that change surrounds us, the Association's Executive Committee met in early June in Williamsburg, Virginia, to lay the foundations for a strategic plan designed to guide the Association through the next five to ten years.

While a number of decisions, albeit tentative, were made, perhaps the real substance of two days of intense meetings lay in the uninhibited brainstorming discussions during which members opined that:

- The core business of drinking water production and delivery will remain a regulated monopoly. However, state economic regulation will change significantly, with movement towards incentive based rates. Further, there will be growing reluctance to approve rate increases, while at the same time, utility expenses will reach their highest levels in history.
- Health standards, largely determined by politics, will remain high and undoubtedly contentious. Gray (reclaimed) water may take on a more significant role in the water utility business. Reassuring the customer that the water provided to their taps is safe and healthy will become even more important. Public relations and customer education efforts will grow to be as important as the technical aspects of delivering safe water.
- Achieving historical ROEs of 10 to 11 percent will be increasingly difficult due to higher capital costs and service requirements, combined with less ability to pass through costs. Investor-owned water utilities will require a "paradigm-shift" in how they do business.
- Municipalities, increasingly reluctant to raise taxes or water rates to the levels necessary to finance SDWA compliance and infrastructure requirements, will find privatization of their water and wastewater operations appealing. Privatization will therefore compete with municipalities' historical strategies of financing water utility service from multiple sources of funds such as taxes, increased water rates, bonds etc.



- Economies of scale will encourage acquisitions and consolidations. Regionalization of water utilities will be driven by regulators. The composition of the Association will change.
- To remain competitive, the industry will have to invest significantly in advanced, cost effective technology.
- Regional water districts, unencumbered by economic regulation, hold the potential to become powerful and efficient, as well as the potential to acquire investor-owned systems.
- The price of water delivered to the consumer will have to increase significantly over the next 10 years in order to satisfy infrastructure, regulatory and customer demands. Seven percent annual increases will result in a doubling of rates in one decade.

Anticipating the inevitable changes that will occur in the industry, in the country and in the world, is critical to ensuring progress in the future. Geographic barriers have been all but eliminated by unprecedented advances in communications technology. As this technology creates neighbors of heretofore far off lands, the difficulty of keeping up with the amount of information bombarding the industry, its regulators and its customers, is becoming increasingly difficult. On the plus side, technology is also providing tools to predict the future and manage the factors that will ultimately determine success. It is therefore becoming increasingly important to become literate in the sophisticated and complex technology that is available.

In the investor-owned water utility business, the traditional monopolistic culture still reigns. However, the emphasis for progressive companies is shifting to customer satisfaction and service. Organizations are being restructured and redefined to align with new and improved organizational goals. Old and new concepts, performance benchmarking, workforce flexibility, cross training and similar are being applied to entities evolving to increase their competitiveness through the effective use of talent.

The water utility industry's changes are being driven by increased government regulation, higher customer demands, competition, resource constraints, an evolving workforce and technology. Obvious is the importance of the Association and its members looking to the future with vision and creating objectives that address these changes.

In the past, water utilities have worked diligently to cut cost, increase customer service, improve water quality, etc. In the future, however, given the technology now available, investor-owned water utilities, to paraphrase the Chrysler advertisement, are going to have to work even harder to "move ahead or be runover."

For example, performance benchmarking. As difficult as it is to define, it will become increasingly significant for water utilities. Many Commissions feel that the benchmarking successes in energy utilities can be readily transferred to water utilities. The reality is that if the water utility industry is not leading the establishment of a benchmarking process that works, it will be saddled with a number of processes that result in a disservice to the industry, its shareholders and its customers. In the time of increased competition and potential opportunities for privatization, such is unacceptable.

Change is inevitable, a challenge, and an opportunity. And change can be highly disruptive. The future is now, however, and the Association and the industry it serves must change to succeed tomorrow. ■

Regulatory Relations Report

by Sharon L. Gascon

As WATER goes to press the Association begins a flurry of representational activities at the numerous NARUC conferences around the country.

NAWC has been successful in developing a number of opportunities for our industry to present its views at these NARUC activities. However, to achieve maximum success, our members' participation and support is extremely important. We urge all of our members to attend at least one of the NARUC Regional Conferences to demonstrate their interest in these important regulator sponsored events.

I don't think you will be disappointed. NARUC conferences provide excellent opportunities for communication with your regulators outside the formal rate case setting.

STATE REGULATORY HIGHLIGHTS

Utility to Run Water System After Sell

On May 22, the New Mexico Public Utility Commission gave final approval to the Public Service Co. of New Mexico (PSNM), allowing the sale of its water utility to the City of Santa Fe.

PSNM will record a gain of about \$6 million, from the sales price of \$48.25 million. The cash proceeds will be used to repay short-term debt incurred when



the company retired nearly \$130 million in Palo Verde lease obligation bonds in March.

The utility will continue to operate the water system through its new energy services business unit, pursuant to a contract with Santa Fe. PSNM has made a request with the PUC to create a separate subsidiary to manage and operate water utilities. The issue will be considered by the commission as part of a comprehensive review of PSNM's recent reorganization.

Pennsylvania PUC Adopts Acquisition Incentives

On May 10, the Pennsylvania PUC adopted a proposed policy statement of incentives for the acquisition and merger of small non-viable water utilities. The action marks yet another step in a series of commission activities designed to strengthen viability of jurisdictional water systems. The commission noted that the purpose of the proposed policy statement was to provide guidelines to the ap-

propriate viable water utilities as to how the acquisition incentives can more readily be utilized. The commission is encouraging consideration of these incentives at this time in order to further regionalize the states water systems. Water companies were encouraged to utilize these options or submit others, provided they are consistent with the guidelines set forth in the proposed policy statement. Each request for an acquisition incentive will be considered on a case by case basis. In order to allow for public comment, the document was first issued as a proposed policy statement and the public will be given 30 days to file comments with the commission.

In efforts to foster acquisition by viable water companies, when such acquisitions are in the best public interest, the commission seeks to assist acquisitions by permitting the use of a number of regulatory incentives including the following: (1) rate of return premiums, (2) acquisition adjustments, (3) deferral of acquisition improvement cost, (4) plant improvement surcharge and (5) operating ratios. A copy of the proposed policy statement can be obtained from NAWC.

Service Termination

The Pennsylvania PUC has issued regulations requiring utilities to give 37 days notice before terminating any service to

hospitals and other health care facilities that have been delinquent in paying their bills. Previous rule had allowed termination on as little as three days' notice. [Docket No. L-920071(L-706)]

he Regulated and the Unregulated Side of the Business

The Minnesota Court of Appeals has upheld a Minnesota PUC ruling that the appliance sales and service business of Minnegasco should be charged for the value of goodwill related to Minnegasco's name, reputation, and image. The court also ruled that the cost of responding to emergency gas leak calls should be allocated between the utility and its appliance service businesses (Docket Nos. C5-94-1820 and C7-94-1821).

The Minnesota Alliance for Fair Competition had alleged that Minnegasco used the goodwill of its regulated utility to subsidize its unregulated appliance sales and repair services business, and used its emergency gas leak response program to subsidize its unregulated appliance sales.

The court agreed with the PUC that Minnegasco's goodwill should be valued to the extent it benefits unregulated operation, and the value should be imputed as a percentage of revenue in subsequent rate cases. (The PUC had noted the "classic precept" that goodwill has no value in monopoly situations, but diversification created authority to impute revenue for goodwill benefiting unregulated operations). The court also agreed that gas leak response costs should be allocated in part to unregulated operations.

Alternative Regulation

A bill, S.B. 232, has been introduced in the Illinois legislature that would allow the Illinois commission, on a trial basis, to approve alternative forms of regulation, including incentive-based rates, for utilities.

Under the proposal, the commission could approve a utility's plan only if (1) it is in the public interest, (2) results in just and reasonable rates, (3) responds to actual change in the industry, and (4) produces benefits for ratepayers.

The bill has been approved by the Senate Energy and Environment Committee, and now must be approved by the Senate before moving to the House.

Lifeline Rates

The Maine Public Utilities Commission has decided to investigate whether changes are needed in existing regulations for water rates as a result of "drastically increased" water treatment, filtration and supply costs. While rejecting a call for an immediate change in rate design and a shift to volumetric inter-class cost allocation, as well as the establishment of special low-income rate schedules, the commission decided to open two separate inquiries to determine whether formal rulemakings were required.

NMPUC Requests Briefs in Rio Rancho Condemnation Case

The New Mexico Public Utility Commission today asked parties to address how state law affects the right of the City of Rio Rancho to issue revenue bonds to be used to purchase Rio Rancho Utility's water and sewer system through condemnation. The commission also is requiring additional information regarding the commission's authority over the sale and abandonment of the utilities.

In its Order, the commission asserted it has at least some authority over the right of the City to issue the bonds and said the City is not exempt from the state law that requires cities to get commission approval to issue the bonds they may need to finance the acquisition of public utility property.

The commission has ordered the City, Rio Rancho Utilities Corporation and the commission staff to file briefs by April 14, 1995, on the details of how the law applies to city's proposal to issue the bonds. The parties then will have the opportunity to respond by May 4, 1995.

In its order the commission found that the potential exists for "jurisdictional competition between the District Court and the commission," and that it is reserving judgement on these issues until the parties can submit briefs. The commission declared that the determination of just compensation is entrusted solely to the District Court and that this function and the commission's power to approve revenue bonds do not conflict.

The City filed a petition last October in New Mexico's Thirteenth Judicial District Court, Sandoval County, to condemn all of the utility's assets. On March 2, 1995, the court granted the City's petition to take immediate possession, but

made no rulings on the jurisdiction of the commission. In January, Rio Rancho Utilities asked the commission to declare that the commission has jurisdiction because it regulated Rio Rancho Utilities. In February, the City asked that the utility's petition be dismissed.

In its Order the commission denied the City's Motion to Dismiss the case and agreed to consider the utility's petition for a Declaratory Order. The commission reserved any further rulings until the parties can address several questions the commission has asked about this case.

Concerning the revenue bonds, the commission has asked the parties to address the three questions that follow:

- Does the City propose to issue revenue bonds to finance the \$53 million deposit ordered by the District Court as a condition of the City's taking immediate possession of RRU's utility systems?
- Does the City propose to issue revenue bonds to finance the amount the District Court may ultimately determine to be just compensation for the City's condemnation of RRU's water and sewer utilities?
- Would prior approval by the commission for any revenue bonds issued and sold by the City in order to finance the \$53 million deposit for immediate possession be required?

IWC Post-Retirement Benefits Issue Resolved

The Indiana Utility Regulatory Commission has taken action to resolve an issue that was not settled in the August 1994 Commission Order on a rate increase requested by Indianapolis Water Company.

In the 1994 Order, the commission approved a 1.98 percent rate increase for the utility, but set aside a decision on how IWC would be allowed to collect revenue to cover the utility's post-retirement benefits other than pensions. Today's Order approves an agreement reached between IWC and the Office of the Utility Consumer Counselor that requires the utility to establish a trust fund that would be used solely to collect and invest revenue that would be used to pay those post-retirement costs.

Voting unanimously on the Order in Cause Nos. 39713 and 39843, the com-

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Regulatory Relations, continued
mission granted IWC the approval to increase rates across-the-board by 2.97 percent.

The rate increase approved in the 1994 Order was based on increases in the company's expenses for taxes, employee wages and employee insurance plans.

Today's Order allows the utility to recover through rates the costs of providing post-retirement benefits other than pensions but requires those revenues be placed in a restricted fund that would be used only for those post-retirement costs. The utility is further required to file with the commission annual reports on the fund. In the event the fund is no longer needed for the post-retirement costs, the contents of the fund would be credited back to ratepayers under an arrangement that would require the consent of the OUCC and the commission.

Delaware Consumer Advocate Warns Competition Could be Costly for Ratepayers

In an interview that appeared in the May 1, 1995, Business Monday section of the *News Journal of Wilmington, Delaware*, Patricia A. Stowell, Consumer Advocate for the state of Delaware, warned that utilities are using competition to justify shifting costs onto their most captive customers. Stowell explained that what started with telecommunications has now spread to natural gas and electricity, reaps benefits for the large consumers but does little for small business and residential customers. She explained, using examples of Delaware companies, that discounts given to large utility consumers by the utilities at the expense of captive ratepayers to keep large consumers from leaving the system are sometimes justified, though many times are not. New legislation gives the Delaware Public Service Commission authority to approve special economic development rates to keep jobs and attract new business. Large consumers can demand discounts from the utilities and threaten to leave the system. Stowell contends that one of the natural consequences to this is that residential rates go up.

Governor Carper's Public Utility Regulatory Task Force honored the Office of the Public Advocate as an effective representative for Delaware's utility customers and encouraged adding in-house legal ca-

pability that would expand the public advocate staff to four.

United Water-Micron Southeast Boise Expansion Plan OK'd

The Idaho Public Utilities Commission today approved a proposal by United Water Idaho (formerly Boise Water Corp.) to expand its southeastern Boise service area and to install new wells and lines with the help of Micron Technology.

On March 8, United Water applied to expand its service territory and announced an agreement by which Micron would spend some \$5 million on new facilities to serve the southeastern Boise area. Micron will recoup its costs through hookup fees paid by land developers whose projects are connected to the system during the next 20 years.

In approving the plan, the commission noted that its staff concluded that without Micron's participation, United Water's investment in the southeast Boise area would be about \$2.6 million (45 percent) more over the next five years than it will be with Micron's involvement. The commission also noted that the future of the utility's hookup fees is at issue in a pending Idaho Supreme Court appeal by the Building Contractors Association of Southwest Idaho.

"Should hookup fees be modified or eliminated as a result of that case, the reimbursement from United Water to Micron may be different than contemplated by the agreement," the commission said in an order. The commission also noted that today's approval does not constitute ratemaking approval of the utility's expenditures in the expanded area.

The PUC turned down a request by intervenor Sharon Ullman for a formal hearing on the expansion proposal. Ullman questioned the dollar impact of the project on existing customers and the utility's construction contracting practices. Ullman has also intervened in the utility's last two general rate cases.

Florida PSC Proposes Economic Development Rule

The Florida Public Service Commission decided May 2 to propose rules governing electric and gas utilities' recovery of economic development expenses.

The 1994 Florida Legislature enacted a bill authorizing the PSC to allow "public

utilities to recover reasonable economic development expenses." The legislation required Florida's Department of Commerce to develop criteria for the PSC to use as a prerequisite when it determines whether an economic development expense is recoverable. Commerce's rules define economic development as "those activities designed to improve the quality of life for all Floridians by building an economy characterized by higher personal income, better employment opportunities and improved business access to domestic and international markets."

The PSC's proposed rule establishes a limit on the total amount of economic development expenses a utility may recover from its ratepayers. The amount of recovery would be limited to the amount approved in each utility's last rate case escalated for customer growth; or 90 percent of the expenses incurred for the reporting period, not to exceed 0.15 percent of the utility's gross annual revenues or \$3 million, whichever is less.

The rule will become final on July 9, 1995, if there are no requests for hearings or if no comments are received.

NARUC Regulatory Personnel Changes

1. The Honorable Galen D. Denio, Commissioner, Nevada Public Service Commission, has been appointed as the Vice Chair of the NARUC Committee on Water.
2. Mr. Joseph Zugmier, Nebraska Public Service Commission, has been appointed as a member of the Staff Subcommittee on Water.
3. The Honorable Ralph Nelson, Commissioner, Idaho Public Utilities Commission has been appointed as the Chair of the NARUC Committee on Finance and Technology to succeed The Honorable Joseph Rhodes, Jr., of Pennsylvania.
4. The Honorable William M. Nugent, Commissioner, Maine Public Service Commission, has been appointed as the Chair of the Subcommittee on Incentive Regulation.
5. The Honorable Lawrence B. Ingram, Chairman of the New Mexico Public Utility Commission, was appointed to the National Association of Regulatory Utility Commissioners' (NARUC) Executive Committee.

Florida Commissioner Kiesling Appointed to AWWA Research Foundation

Commissioner Diane K. Kiesling of the Florida Public Service Commission was recently appointed by the National Association of Regulatory Utility Commissioners (NARUC) to serve as NARUC's representative on the Public Council on Water Supply Research of the American Water Works Association (AWWA) Research Foundation.

Commissioner Kiesling, who was appointed by Governor Lawton Chiles in November 1993 and reappointed to a four-year term beginning January 1994, has been an active member of NARUC's Committee on Water and worked closely with NARUC's National Regulatory Research Institute.

As a member of the AWWA Research Foundation's Public Council on Water Supply Research, Commissioner Kiesling will be involved in the foundation's ongoing research into all facets of drinking water resource development and maintenance; monitoring and analysis; treatment technologies; storage and distribution system operations; facility planning and management; and environmental issues.

Commissioner Kiesling possesses an extensive background in law and, prior to her appointment to the commission, served as a Hearing Officer of the Florida Division of Administrative Hearings where she was directly responsible for utility siting cases. Prior to her service as a Hearing Officer, Commissioner Kiesling practiced law in a private firm and, before that, served as an attorney for the Florida Department of Administration/Division of Retirement.

Currently, Commissioner Kiesling serves as chairperson-elect of the Public Utilities Law Committee, a committee within the Administrative Law Section of the Florida Bar, and is the Continuing Legal Education Chair for the committee. She is also a member of the Tallahassee Women Lawyers Association and the Florida Association for Women Lawyers.

Commissioner Kiesling received a B.A.

degree in art history from Florida State University, and a J.D. with honors from the Florida State University College of Law.

Commissioner Kiesling, in a recent interview in Florida, answered several questions on water issues:

Q: Why are the media and policymakers now focusing on water and water related issues?

A: There are several reasons for the new focus on water issues: federal mandates such as the federal Safe Drinking Water Act (SDWA) have increased the cost of water treatment; the initial investment, as well as the repair and maintenance, of infrastructure of water systems is increasingly expensive; and recognition that water is a finite resource.

Q: How are these issues being addressed on a national level?

A: The SDWA reauthorization, which is pending before Congress for the second year, was proposed to temper the costs associated with implementing all of the standards of the SDWA. Last year's proposal included a cost/benefit analysis designed to weigh the cost of regulation against the benefit to be derived from reducing or eliminating certain health risks. It also contained an EPA proposal to mandate viability assessment by each state's primary agency.

The NARUC is involved in water issues on a national level. NARUC has participated in drafting reauthorization legislation. NARUC has also passed a resolution on small water system viability to encourage state agencies to identify small water systems which may become non-viable and to intervene before these systems become a problem or a health hazard.

Q: Why is there concern about the increasing expense related to building and maintaining water utility infrastructure?

A: In Florida and elsewhere in the U.S., there is an increase in abandoned, bankrupt, and otherwise failing systems due to the increased costs associated with the

SDWA and aging infrastructure. Non-viable systems must be identified to insure safe and reliable water service to customers. Several states have developed small water system viability models. Florida has recently initiated its small water system viability program which will eventually identify all non-viable systems.

Q: How can Florida assure that viable utilities will be able to provide water for Florida's future?

A: First, let me define viability. A viable utility is one which is self-sustaining, and has the commitment and the financial and technical ability to meet the regulatory standards on a long-term basis. Approximately two-thirds of the water systems in the United States serve 500 people or less. Small systems have problems with meeting regulatory standards (due to small size, deteriorating physical infrastructure, lack of access to capital, and lack of technical and managerial capabilities).

The intent of viability analysis is to identify small systems that are getting into trouble so that their problems can be worked on before they are entirely non-viable, abandoned or bankrupt. This also provides an earlier opportunity for them to be absorbed by larger, more viable systems. Environmental and economic regulators need to adopt viability assessment policies.

Q: What do you believe needs to be done in Florida?

A: I would envision one of the first steps to be to evaluate the number of existing small systems in Florida and their financial condition (capital, revenues, annual reports, and needs for system expansion or repair due to growth or regulatory compliance). Viability assessment models have been developed to measure the fiscal viability of systems and would be a useful tool in making preliminary assessments. After analyzing the existing systems, a plan should be developed which addresses the needs of the small drinking water systems

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Kiesling, continued

and alternatives for those systems which are troubled or non-viable. The plan should consider legislative changes, as well as internal policy changes and agreements with other regulatory agencies necessary to implement the plan. Incentives should be considered to facilitate larger systems taking over smaller, troubled systems.

Q: What types of incentives can be developed to improve the viability of small or failing systems?

A: There are several incentives which can be developed for small systems. This Commission already uses a few of these incentives. One good example that has been in place for several years in Florida is special rate case assistance. Other incentives include: accelerated depreciation; emergency rates; simplified reporting; involuntary mergers, acquisitions or receiverships; positive acquisition adjustment; higher than normal rates of return for certain acquisition and improvement costs; and interconnection with other systems.

The key element, however, is for the Commission to act now and to take a proactive role in safeguarding the finan-

cial integrity of drinking water systems in Florida by developing a meaningful, comprehensive viability program.

Q: Recognizing that water is a finite resource, how can the Commission insure that drinking water will continue to be available and affordable?

A: The availability and affordability of water is a major concern of the Commission. Florida, as well as the rest of the nation, has become increasingly aware of the need for conservation as water has become a limited resource. Additionally, the cost of providing water has dramatically increased in part due to the utilities' needs to meet the more stringent regulatory standards mandated by the Federal Safe Drinking Water Act. As a Commissioner, I hear from customers at rate hearings throughout the state about the ever increasing cost of water and wastewater service, which is being driven up by federal safe drinking water mandates and other environmental requirements even before costs related to water conservation and reuse are included. However, a comprehensive water policy based on integrated resource planning is necessary to insure the continued avail-

ability of water. Such a comprehensive policy must be balanced with the customer's ability to pay and the cost borne by the utilities.

Q: How is the Public Service Commission trying to encourage conservation?

A: The Commission is active in promoting water conservation in several ways. First, in rate structure design, rates can be established to encourage conservation. The basic rate design referred to as the "base facility gallonage charge" rate structure is a type of conservation rate structure which is used extensively by this Commission. As the need arises, the Commission also considers other rate structures designed to effect conservation.

Also, in the reuse of reclaimed water, the Commission has been given statutory authority over setting rates for the recovery of utility investment in plant designed for reuse of reclaimed water. The statute authorizes the PSC to spread the cost of plant among the water customers, the wastewater customers and the reclaimed water customers, since everyone benefits from the reduced demand on the source of the drinking water.

FPSC Commissioners Reappointed

Susan F. Clark was appointed by Florida Governor Chiles to the Public Service Commission in August 1991 to fill an unexpired term and is currently serving a two-year term as PSC Chairman. She served as the PSC's General Counsel from 1988 until her appointment as Commissioner. Prior to that, she was the Florida Public Service Commission's Associate General Counsel and Deputy General Counsel/Director of the Division of Appeals 1980 to 1988. Before joining the PSC, Clark was the staff attorney with the Florida Joint Administrative Procedures Committee from 1977 to 1980, and was the staff attorney for the Florida Senate Legislative Services from 1974 to 1977.

Commissioner Clark received her bachelor's degree in political science and

her law degree from the University of Florida.

Commissioner Clark said, "I appreciate the Governor's confidence in me, and am looking forward to serving another term. I will continue to work to maintain a dynamic regulatory system that keeps our utilities apace with our citizens' need for the highest quality utility services at the lowest possible rates."

J. Terry Deason was first appointed to the Commission in February 1991. Prior to his appointment, Commissioner Deason served as Chief Regulatory Analyst in the Office of Public Counsel. From 1981 to 1987, he served as Executive Assistant to former PSC Commissioner Jerry Gunter. Prior to his employment at the PSC, he served as a legislative analyst with the Office of Public Coun-

sel from 1979 to 1981.

He attended the United States Military Academy at West Point, and received his BS degree in accounting, summa cum laude, from Florida State University. Commissioner Deason also received his Masters of Accounting from FSU in 1989.

Commissioner Deason said, "I am gratified by the Governor's confidence in me. I am proud of the accomplishments of the past four years and am even more proud of the way the Commission conducts its business today. We have worked to earn the trust of the people, and I think that we have made great strides in that respect. I pledge to work during the next four years to show that the trust and confidence of the Governor and the people of Florida is deserved."

Wilson Appoints Henry M. Duque to the Public Utilities Commission

Governor Pete Wilson announced the appointment of Henry M. Duque to the Public Utilities Commission on April 3, 1995. He replaces Norman Shumway, who resigned from the Commission in March, 1995.

"Henry has extensive experience in the private sector that will help the PUC's effort to foster an efficient and vigorous California economy," Wilson said. "His knowledge of the business and financial community will be a valuable addition to the Commission, and I'm confident Henry will serve in the best interests of the people of California."

Commissioner Duque, of Los Altos Hills, was Vice President and Senior Marketing Officer for the San Francisco office of Trust Services of America, Inc., a subsidiary of California Federal Bank.

He has been with California Federal

Bank since 1983. He was Senior Vice President/Senior Executive for their Northern California division from 1988 to 1990, and was Senior Vice President/Northern California Division Head from 1983 to 1988.

Previously, he worked for Western Federal Savings and Loan Association from 1962 to 1983, where he served as Vice Chairman of the Board (1981-83), Executive Vice President (1974-81), Senior Vice President and Secretary (1970-74), Administrative Vice President (1965-70), Regional Vice President (1964-65) and Assistant Vice President (1962-64).

A Republican, Commissioner Duque is involved in numerous community activities including: Director of the California Neighborhood Housing Foundation, Member of the Board of Fellows for Claremont University's Gradu-

ate School of Business Committees on Investment Budget and Finance, Director of the American Red Cross (Bay Area), past Chairman of the American Red Cross (San Francisco and Los Angeles chapters), and past Chairman of the Board for St. Francis High School in Mountain View.

Commissioner Duque earned a bachelor's degree in political science from Stanford University in 1954. He studied law at the University of California, Boalt Hall School of Law (1956-57) and graduated from the University of Indiana, Graduate School of Savings and Loan in 1967. Duque also attended the Building Societies International School in Oxford, England in 1971.

He will receive a salary of \$88,062 reflecting a 13% reduction as directed by the Governor.

Dr. Janice A. Beecher Joins Indiana University Center for Urban Policy and the Environment

Dr. Janice A. Beecher has joined the Center for Urban Policy and the Environment, Indiana University, as a Senior Research Scientist and the Director of Regulatory Studies. The Center is located at Indiana's School of Public and Environmental Affairs (SPEA) on the Indianapolis campus. Dr. Beecher also joined the SPEA faculty as an adjunct associate professor, and will teach graduate courses in public policy and regulation. Drawing on an interdisciplinary faculty and staff, the Center has broad research capability in urban and environmental policy and planning, and specialized expertise in water, wastewater, and stormwater issues.

Prior to joining the Center, Dr. Beecher managed the water research program of the National Regulatory Research Institute (NRRI) at the Ohio State University. NRRI is the research arm of the NARUC. Dr. Beecher also served for five years as a policy advisor to the Chairman of the Illi-

nois Commerce Commission. NARUC passed a resolution this spring honoring Dr. Beecher for her contributions to the association and her efforts in the area of water utility regulation. She plans to continue to work closely with state regulatory commissioners and staff as part of her ongoing research agenda. She also will remain active in the American Water Works Association, where she serves on the Rates and Charges and Conservation Committees.

Dr. Beecher is completing a study for NRRI on "Regulatory Implications of Water and Wastewater Utility Privatization." Her previous NRRI publications include "Revenue Effects of Water Conservation and Conservation Pricing," "Meeting Water Utility Revenue Requirements," "Viability Policies and Assessment Methods for Small Water Utilities," "Integrated Resource Planning for Water Utilities," "Compendium on Water Sup-

ply, Drought, and Conservation," and "Cost Allocation and Rate Design for Water Utilities." Her research has been presented at numerous meetings and conferences, and in various journals.

Dr. Beecher's areas of expertise include regulatory policy and decisionmaking, with a specialization in the structure and regulation of the water utility industry. Her current work focuses on privatization, incentive regulation, performance benchmarking, and regionalization. She also is working on a book on integrated resource planning for water utilities. Through the Center, Dr. Beecher is working on a number of sponsored research projects across the country.

Dr. Beecher's address is Center for Urban Policy and the Environment, Indiana University, 342 N. Senate Avenue, Indianapolis, Indiana, 46204-1708. Her direct number is (317) 261-3047 and her fax number is (317) 261-3050.

Ohio Governor Appoints Ronda H. Fergus to PUCO

Commissioner Ronda H. Fergus was appointed to the Public Utilities Commission of Ohio (PUCO) by Governor George V. Voinovich to a five year term beginning April 11, 1995.

Commissioner Fergus began her career with the PUCO in November 1980, as an administrative law judge in the Legal Department. In this position, she presided over quasi-judicial proceedings involving

the regulation of telecommunications and water and sewer companies. In December 1985, Commissioner Fergus was promoted to chief of the telecommunications, water and sewer section of the Legal Department. By January 1989, she became assistant to the legal director and special projects coordinator, working on the implementation of alternative regulation legislation in the telecommunications area

and the development of a negotiated statewide approach to lifeline telephone service in Ohio. Commissioner Fergus was then promoted to chief of the telecommunications section of the Utilities Department in December 1994.

Commissioner Fergus is a graduate of the Ohio State University and the Ohio State Law School. She is married to John C. Fergus II and has a son, Corey.

Ralph Nelson Elected as Idaho PUC President

The Idaho Public Utilities Commission has elected Commissioner Ralph Nelson as Commission President. The Commission President is its chief executive officer. Under Idaho law, the three-member commission elects one of its members as president during the first week of April in odd-numbered years. The president signs contracts on the commission's behalf, is the final authority in personnel matters and handles other administrative tasks.

Commissioner Nelson is vice-chair of the Finance and Technology Committee of the National Association of Regulatory Utility Commissioners and is past presi-

dent of the Western Conference of Public Service Commissioners.

Commissioner Nelson was first appointed to the commission by Governor Cecil Andrus in March 1987. In January 1993, the Governor appointed Nelson to a second, six-year term that expires in 1999.

Before joining the commission, Commissioner Nelson, a certified public accountant, was in private practice in Coeur d'Alene, Idaho. He is a third-generation Idahoan. His grandfather, Ralph S. Nelson, served five terms in the Idaho State Senate between 1916 and 1930.

Pennsylvania PUC Elects Commissioner Lisa Crutchfield as Vice Chairman

The Pennsylvania Public Utility Commission has elected Commissioner Lisa Crutchfield as its Vice Chairman. She succeeds Joseph Rhodes, Jr. in the position on the five-member panel which is responsible for supervising and regulating over 4,000 public utilities in the commonwealth. Commissioner Crutchfield was appointed to the Commission on April 28, 1993 by former Governor Robert P. Casey.

Prior to her appointment to the Pennsylvania PUC, she served as Deputy Finance Director for the City of Philadelphia. Before her public service career, Commissioner Crutchfield was employed as an investment banker in New York City. She holds a Bachelor of Arts degree in Economics and Political Science from Yale University and a Master's in Business Administration from Harvard Business School.

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Recent Regulatory Decisions



by Stephen B. Genzer and Mark L. Mucci
LeBoeuf, Lamb, Greene & MacRae, LLP

FLORIDA COURT OVERTURNS SETTING OF UNIFORM RATES FOR 127 UTILITY SYSTEMS

In an appeal from a final order of the Florida Public Service Commission (PSC), the Florida District Court of Appeal reversed a final order of the PSC in which uniform statewide rates were set for the 127 water and waste water utility systems owned by Southern States Utilities, Inc. (SSU). *Citrus County, Florida and Cypress and Oaks Villages Assn. v. Southern States Utilities, Inc. and Florida PSC*, Case No. 93-3324, 93-4089 (April 4, 1995). SSU serves approximately 180,000 customers throughout Florida through formerly small independent water and waste water utilities which it has acquired. On May 11, 1992 SSU requested an increase in rates for 127 of its systems, serving 75,000 water customers and over 25,000 waste water customers. A final order was issued by the PSC on March 22, 1993, granting an increase in revenues and approving a new rate structure in the form of statewide uniform rates for the water and waste water customers served by the 127 utility systems. Citrus County and the Cypress and Oaks Villages Association appealed the decision of the PSC. The court reversed, not on the separate issues argued by the appellants, but on the basis that the PSC has exceeded its statutory authority when it approved the uniform statewide rates.

Under Florida law, the PSC may set rates for a utility system composed of "facilities and land used and useful in providing ser-

vice and, upon a finding by the Commission, may include a combination of functionally related facilities and land." Section 367.021(11), Fla. Stat. (1991). In other words, only if the utility facilities are a "combination of functionally related facilities and land" so as to constitute one system, would the court approve the setting of uniform rates for all customers of the systems. The court noted the "apparent absence of evidence that the systems were operationally integrated, or functionally related, in any aspect of utility service delivery other than fiscal management." In testimony provided at the hearings below, witnesses on behalf of SSU and other parties had stated that while SSU may in the future be ready for uniform rates, set according to rate bands aggregating similar systems together, the utility was not yet at a stage where such grouping of systems or setting of rates would be appropriate.

The court concluded that the systems involved were not "functionally related," and that the only relationship was apparently fiscal functions resulting from common ownership. As noted by the court, "SSU's systems differ greatly in their levels of CIAC, their size, their age, the number of customers served, the status of the system when SSU acquired it, their consumption levels, and the type of treatment used." The court concluded that Florida law did not authorize the PSC to approve uniform statewide rates for utility systems which are operationally unrelated.

The court also addressed a contention on appeal by the Florida Office of Public

Counsel (OPC) that the PSC should have recognized SSU's gain on the sale of two of its systems. The OPC argued that this resulted in a greater than reasonable rate of return being provided to SSU. The court stated that the OPC had not carried its burden of showing that the PSC failed to comply with the requirements under Florida law that the rate of return not "be made so high as to provide greater than a reasonable rate of return." The court deferred to the determination of the PSC to decline to take the proceeds from the sale into account in determining SSU's rates.

INDIANA UTILITY REGULATORY COMMISSION APPROVES RESTRICTED TRUST FOR POST-RETIREMENT BENEFITS OTHER THAN PENSIONS

In an order dated April 26, 1995, the Illinois Utility Regulatory Commission (Commission) approved the implementation of an increase in the rates of Indianapolis Water Company (IWC) after the implementation of a restricted fund in which to hold revenues collected for post-retirement benefits other than pensions (OPEB). In the *Matter of the Petition of Indianapolis Water Company and Zionsville Water Corporation for the Approval of the Merger of the Two Corporations and New Schedules of Rates and Charges for Water Utility Service*, Cause No. 39713, 39843 (April 26, 1995). IWC's restricted fund proposal grew out of an August 10, 1994 order in which the Commission approved
(continued next page)

Regulatory Decisions, continued
an increase in IWC's rates, but reversed the issue of the collection of OPEB revenues, in order to meet expenses set in accordance with Statement of Financial Accounting Standards 106 (SFAS 106). On October 11, 1994, IWC filed a restricted fund proposal together with supporting testimony. On April 7, 1995, a stipulation of settlement was reached by IWC with the Office of the Utility Consumer Counsel. In that stipulation, the parties agreed to the formation of a grantor trust which would receive, invest and disburse all amounts received by IWC in rates to cover its OPEB obligations.

Under the terms of the grantor trust, IWC will transfer to the trust all amounts it receives to cover its OPEB expense. Through the trust, such funds will be invested until needed to make payments for OPEB purposes, and the funds will be used only for OPEB payments. The trust agreement contains investment standards for the trust assets, including a limitation that no more than five percent of the assets may be invested in the common stock of any one company, including IWC and its parent company. The trust agreement specifically provides that any changes to that agreement would require the consent of the Office of the Utility Consumer Counsellor, and the approval of the Commission.

With the approval of the restricted fund in the form of the grantor trust, the Commission authorized IWC to implement an increase in its revenues in order to reflect OPEB expenses computed in accordance with SFAS 106.

VIRGINIA COMMISSION CONFIRMS ACQUISITION ADJUSTMENT FOR STOCK PURCHASE

In an order on reconsideration the Virginia State Corporation Commission (Commission) confirmed its earlier determination that it was appropriate to grant an acquisition adjustment to Po River Water and Sewer Company (Company), to reflect the amount of capital the new owner has devoted to public service in excess of original cost less depreciation of the water company. *Virginia State Corporation Commission v. Po River Water and Sewer Company*, Case No. PUE920039 (Feb. 10, 1995). The current owner of the Company is Carlyle Group, Inc. (Carlyle),

which acquired the Company in December 1990. As found by the Commission, the purchase price of \$500,000 was determined through "arms length" bargaining. The Commission determined further that "the investment was made prudently for the benefit of the customers and the utility." The prior owner of the Company was primarily concerned with the real estate development in the area served by the Company. The Commission noted that Carlyle had over 20 years of experience in operating water and sewer systems, and found the level of experience of Carlyle to be of benefit to the Company and its customers. The Commission found that Carlyle had brought financial stability to the Company, enabling it to provide a better quality of service in the future, and added that the record showed that Carlyle had provided the utility with needed funds to meet its bills as they have come due. The Commission concluded "the utility and its ratepayers have benefited from this acquisition."

The Commission noted that, although acquisition adjustments typically reflect the purchase of utility plant, acquisition adjustments can be granted when utility stock has been purchased. The Commission stated that the fact that the acquisition takes the form of a stock purchase does not prevent the Commission from making the factual determination that an acquisition adjustment is warranted. The acquisition adjustment was amortized over 10 years, as an appropriate period which does not unduly burden the ratepayers and also allows timely elimination of the adjustment.

MAINE COMMISSION OPENS INQUIRY TO EXPLORE NEED FOR LOW INCOME WATER RATE DISCOUNT PROGRAM

In response to a request from the Maine Public Advocate, the Maine Public Utilities Commission (Commission) has opened an inquiry on the issue of a low-income water rate program. *Re Low-Income Discount Rate for Residential Household*, Docket No. 94-430, 160 PUR 4th 85 (Feb. 23, 1995). The inquiry was initiated in order to explore issues raised by the expectation that water rates, which had historically been relatively low, were rising rapidly as a result of costs incurred due to the passage of the federal Safe Drinking Water Act. The Commission stated: "We

recognize the potential for such sharply higher rate levels to bring hardship to customers who previously had no difficulty affording the charges for water service."

The Public Advocate had proposed a rule whereby every water utility in the State would be required to administer a reduced cost service program for qualified low-income residential customers. The Commission declined to initiate a rulemaking, but opened an inquiry in order to gather information to assist it in evaluating the proposed rulemaking. The Public Advocate had also proposed to allocate the future rate increases to each customer class in proportion to the volume of water sold to each customer class in the preceding calendar year. The Public Advocate argued that supply-related costs constitute the majority of new costs to water utilities. The Commission stated that while it recognized that there were difficult questions of inter-class rate design fairness, especially in light of significant water rate increases, that issue would also be considered in the course of the inquiry. The Commission recognized several concerns as noted by its staff, with the Public Advocate's proposal. First, the allocation presented in the Public Advocate's proposal may not be appropriate for all cases, and thus a rule imposing a particular cost allocation would not be appropriate. Second, as the rule would necessarily be prospective, its impact on the State's utilities would be uneven given that the utilities are at various stages of compliance with the SDWA. Third, the Commission would want to consider the ability of industry to absorb dramatically higher water costs resulting from any proposed cost allocation methodology. Finally, the specific types of costs that would be included as water treatment, water filtration, and other water supply-related costs would need to be further defined in order to avoid disputes regarding the application of the Public Advocate's proposed allocation methodology. The Commission concluded that it would utilize the inquiry to gather information regarding the impact of the proposals. ♦

Thanks to Walton Hill of United Water Resources, S.B. Givens of Indiana-American Water Company, and Frank J. Miller of Huber, Lawrence & Abell, for providing items of interest.

Quorum Call

Louis Jenny



The 104th Congress, begun in January of this year, is about 1/4th completed yet it has already been made clear that it is a very different Congress than any we have seen in some time. Furthermore, it could prove to be a friendly Congress to the investor-owned drinking water industry, though nothing is a sure bet in Washington, D.C.

Congress converted to Republican control in January of this year and you don't have to look hard to see the change in emphasis this precipitated. For example, there is clearly a new interest in all matters relating to privatization in Washington. The new Speaker of the House has named Congressman Scott Klug of Wisconsin to the helm of a special Congressional Task Force on privatization. In testimony delivered last February to the House Budget Committee, Congressman Klug spoke in detail of his agenda for privatization and broke the concept down into four basic areas:

- 1) Asset Sales or Leasing: He used selling the Naval Petroleum Reserve or the National Helium Reserve as examples of federal assets being sold to raise money and/or end federally financed programs.
- 2) Contracting Out: The example of allow-



ing the IRS to use private collection companies to collect delinquent taxes was just one example of how the federal government could take advantage of private sector experience and know-how to everyone's advantage.

- 3) Functional Conversions: Privatizing the Postal Service, Amtrak, or the National Weather Service would be examples of functional conversions.
- 4) Lifting Legislative and Administrative Privatization Barriers: This, of course, is the area where the activities of the NAWC's Congressional Relations efforts are focused and where I will elaborate.

CIAC

There are encouraging signs that Congress may move to consider CIAC tax repeal legislation sometime this year. As this column is being written the House Ways and Means Committee has just announced hearings to cover a broad range of "mis-

cellaneous" tax measures, and the CIAC tax repeal is one of them. (The NAWC will of course be submitting testimony in support of this provision.)

While merely holding hearings on a given topic by no means assures that CIAC tax repeal will be passed into law, it is a good indication. It is presumed that the many tax provisions which are the subject of these hearings (231 in all) will be the basis of a miscellaneous tax bill which the committee and then the entire House will consider. The hearings take place the week of July 10. We will likely know more once they are completed.

Since the separate or "stand alone" CIAC tax repeal bills were introduced in February by Congresswoman Nancy Johnson (R-Conn) and Senator Charles Grassley (R-Iowa), we have been focusing on getting co-sponsors to the bill. We have particularly been focusing on getting Representatives' and Senators' names on the bill who are members of the respective tax writing committees of the Senate and House. And on that front we have been successful, though we could use more. Thus far we have 36 co-sponsors on the House bill, 9 of whom are Ways and Means Committee members, and in the

(continued next page)

Quorum Call, continued

Senate we have 12 co-sponsors, seven of whom sit on the Finance Committee.

Overall co-sponsorship of the bills is important because it demonstrates the popularity of the bill throughout Congress and the country, thereby increasing their chances of final passage. Having co-sponsors who sit on the respective tax writing committee is important because they make many of the key decisions on tax legislation.

We are always looking for more co-sponsors, and Members of Congress are much more likely to sign onto a bill if they hear from their constituents that the bill is important to them. Therefore, I encourage you to write to your Senators and Representatives and ask that they co-sponsor these bills. If you need information on the bills, how to get in touch with your elected officials, or draft letters, please do not hesitate to contact me at the NAWC.

There is a whole host of other areas where the NAWC has been active in legislative initiatives to remove barriers to privatization.

Publicly Owned Treatment Works (POTW)—Under current law, a wastewater facility owned privately, yet performing the same function as an identical municipally owned wastewater facility, can be more stringently regulated. This, therefore, favors continued government ownership. This variation is due to the definition of a POTW in current law which is based on ownership rather than use.

At the request of the NAWC, the House included language in its recently passed Clean Water reauthorization bill, which corrects this problem. The Senate has yet to move on their version of the bill, but we are optimistic that should the Senate consider Clean Water legislation, this will be included.

Executive Order 12803 Codification—In 1992, President Bush issued Executive Order 12803 which partially overturns an Office of Management and Budget rule which requires state and local governments to repay any federal grants when a municipal facility which had received such grants is privatized. Due to disappointing implementation of this order, there has been an effort to pass legislation codify-

ing this order and perhaps improving it by completely eliminating the need for municipalities to repay these grants, provided the facility continues to provide the same service to the public. Adoption of this will greatly increase a community's water and wastewater options.

Thus far legislation has been introduced by Congressman McIntosh of Indiana to do this, though strategy for passage is still uncertain. Further, more moderate language, like that of the original order, was passed as part of the Clean Water Reauthorization in the House.

Repeal of section 1926 (b) of the U.S. Code—This section of the code was written in 1961 to give protection to rural water associations repaying Farmers Home Administration Loans. It has since been broadly interpreted to provide complete protection from competition regardless of whether the integrity of the loan is in any way jeopardized. Though this was not the legislative intent of the provision, it has proved to be a significant impediment to privatization or annexation efforts in rural areas. The NAWC supports revision of this section to assure a level playing field between municipal and investor owned water systems, yet preserve the provision's original intent.

The NAWC has pursued a "fix" for this provision as part of the 1995 Farm Bill moving through the respective Agriculture Committees. Recent developments have given us hope that this section can be modified as part of that larger legislation this year.

Regulatory Sunset Legislation—legislation is being considered in the House which would require the federal government to, on a regular basis, review all federal rules and regulations and either renew, revise, or delete them. We are encouraged that language which the NAWC suggested will be included in that bill which would force the federal regulating bodies to take into account the concerns of the private sector when reviewing such rules. This bill has yet to be considered by the full House of Representatives or the Senate.

SDWA

With all of this activity on the privatization front, it is hard to believe

that we could be seeing a Safe Drinking Water Act reauthorization this year also, but that may be the case.

Thus far little formal activity has taken place, such as hearings or committee mark-ups, but there have been months of discussions by staff, particularly in the Senate. Sen. Kempthorne (R-Idaho) chairs the appropriate Subcommittee in the Senate and is poised to introduce a bill and move on it. The NAWC has been working closely with his staff to assure that a bill can be written which will improve the SDWA to everyone's satisfaction.

The House Commerce Committee is charged with SDWA jurisdiction and due to its very wide jurisdiction, thus far, their efforts have been elsewhere. However, the committee staff has been actively working on language and hopes to pursue SDWA as soon as possible.

In addition to tracking the SDWA reauthorization in general, the NAWC has been advocating language to be included in the reauthorization package which would provide a water utility with a defense from state tort claims, provided it is in compliance with SDWA regulations.

NAWC President Jack McGregor came to Washington in June and met with Senator John Chafee (R-RI) and his staff on this issue. (Sen. Chafee is the chairman of the Senate Environment and Public Works Committee which has jurisdiction over SDWA reauthorization.) Though this is a potentially controversial issue, the meeting was positive and we will continue to actively champion this amendment.

With all of the pro-privatization activity in Washington, there are many opportunities for the NAWC and the entire investor-owned drinking water community to address many of the concerns which have been facing the industry for years. To be sure, there is much talk in Washington about the issues we support, but that does not mean they will get taken care of.

The NAWC has developed and will continue to use many tools to maintain its voice in Washington's legislative process. They include, but aren't limited to, direct lobbying on the part of the NAWC staff and on the part of NAWC Members, "grassroots" letter writing, and of course the NAWC-PAC. ♦



New IRS Tax Exempt Bond Rules Will Affect Utility Management Contracts

by

Christopher H. Washburn, CPA, Partner
David R. Laurinaitis, CPA, Senior Manager
KPMG Peat Marwick, Philadelphia

Many utilities are considering alternatives to privatize, or manage, municipal water or wastewater systems. The potentially significant opportunities for operating and maintenance (O&M) contracts are increasingly competitive and must be carefully structured. Whatever structure is chosen must consider the consequences to the tax exempt status of any underlying municipal bonds.

To be exempt from both regular and alternative minimum tax, a bond must not be a private activity bond. If a bond is a qualified private activity bond, it still will be exempt from regular income tax but will be subject to alternative minimum tax. The structure for most O&M contracts must therefore avoid converting any municipal bond into a private activity bond.

The Internal Revenue Service (IRS) issued proposed regulations on December 29, 1994 to provide guidance on the private activity bond restrictions. These regulations provide a modification and liberalization of the safe harbor rules for management contracts contained in prior IRS guidance, but they still contain broad interpretations which appear to go beyond the intent of the statute.

Private Activity Bond Test

The purpose of the private activity

bond test is to curtail arrangements where the benefits of tax exempt financing have the potential of being passed through to a non governmental person. The regulations state that it is to be determined without regard to whether the benefits are actually transferred, clearly a broad interpretation of the statute.

A bond is a private activity bond if the issue satisfies either the private business test or the private loan financing test. The private business test is satisfied if the issue meets both the private business use test, which relates to the use of bond proceeds, and the private security or payment test, which relates to the manner in which the issue is secured or will be repaid. The private loan financing test is met if proceeds of an issue are used to make loans to a non government person.

Private Business Use Test

The private business use test is met if more than 10% of the proceeds of an issue is used in a trade or business carried on by a non governmental person. A person uses proceeds for this purpose if he directly or indirectly owns or leases financed property, is loaned the proceeds of the issue, or has actual or beneficial use of the financed property under a management or incentive pay contract, output contract, or other arrangement.

The IRS previously set forth guidelines under which it would rule that management and other service contracts will not result in private business use of bond financed facilities. Revenue Procedure 93-19 prohibited manager compensation based on gross profits and required that:

- 1) Compensation be reasonable;

- 2) The term of the contract must not exceed five years, including all renewal options. The five year term was reduced to three years for per unit fee arrangements and to two years for arrangements based on a percentage of revenues or expenses.

- 3) In the case of five year contracts, the owner must be able to cancel the contracts without penalty after three years.

Under this early guidance, the maximum allowable term of the contract was five years, obviously a short time period considering the nature of most utility maintenance contracts. The proposed regulations still provide for reasonable compensation for services not based in whole or in part on a share of net profits, but also set forth more liberal safe harbors for the term of the contract based on the type of fee arrangement. The proposed rules provide that generally a management contract results in private business use if it is not a qualified management contract

(continued next page)

or if the service provider is treated as the lessee of the financed property. A qualified management contract must be described in one of the following fee arrangements:

Fee Arrangement	Term
a) 100% fixed fee arrangement <i>A fee does not fail to qualify as a fixed fee as a result of a single incentive award when either gross revenue or expense target is reached, but not both.</i>	Not to exceed lesser of 50% of useful life or 15 years. Useful life is the class life of the property under Section 168.
b) 80% fixed fee arrangement for each annual period of the contract.	Not to exceed lesser of 80% of useful life or 10 years.
c) At least 50% is fixed fee for each annual period, or all the contract is based on a captivation fee or combination of the two.	Term must not exceed 5 years. Contract must be terminable by governmental person after 3 years without termination penalties.
d) All compensation is based on per unit fee or periodic fixed fee. <i>Per unit fee must be specified in the contract.</i>	No longer than 3 years. Terminable after two years, without termination penalties.
e) All compensation is based on a percentage of fees charged or a combination of per unit fee and a percentage of revenue or expense fee.	No longer than 2 years. Terminable after 1 year without termination penalties.

The regulations define a period fixed fee as a stated dollar amount for services rendered for a specific period of time. The fee may be automatically increased based on an independent outside standard such as the CPI. In addition, the regulations allow for incentive payments to qualify as fixed fees only if they are a stated dollar amount.

The regulations are not clear, but it would appear that an incentive award for any given year cannot exceed the appropriate allowable percentage of the total fees for that year. Therefore, an incentive payment fee for a given year could be capped at 20% of the total contract price if there is an 80% fixed fee arrangement. It would be much more realistic if the regulations would instead provide for a cumulative ceiling on the incentive award in lieu of the annual test.

Although the term of the contracts has been extended, there still remains many unanswered questions such as how the useful life restrictions will be determined. A reasonable interpretation would be for the term of the contract to be based on the economic useful life of the property when placed in service, and not when the contract is signed. In situations where separate as-

sets of a facility have been financed with different issues, guidance should be provided to apply the tests to each group of assets separately along with the respective bond issues. Furthermore, there remains a substantive issue whether even 15 years is a sufficient term length when considering

water or wastewater facilities.

The regulations also provide a de minimus use exception, and a detailed discussion along with examples of how use by the general public will not be considered private business use. Generally, the regulations provide more detailed guidance and bright line tests in determining the public use exception than had previously been provided.

Private Security or Payment Test

The private security or payment test is generally met if the payment of principal or interest on more than 10% of the bond proceeds is directly or indirectly secured by property used for a private business use or payments derived from such property.

Despite several specific rules, the proposed regulations create a difficult distinction between the tests for private business use and private security or payment. It appears that if a property is deemed to meet the private business use test, it probably will meet the private payment or security test. In a very broad interpretation of the statute, the IRS takes the position that payments by the general public for water distributed by a facility that is the subject of a management contract will re-

sult in private business use. In one specific example, city P issues general obligation bonds to finance a hospital that it owns. A management contract of the hospital results in private business use. P will use the revenue of the hospital to pay debt service on the bonds. The IRS has determined that the bonds satisfy the private security or payment test because the revenue from the hospital are payments in respect of property used for a private business use. The regulations appear to be implying a direct tracing of the facility revenue to the bonds even though the bonds are general obligation bonds.

For measurement purposes, the security for payment of debt service is determined by the underlying bond documents and any other arrangements. The calculation generally requires a present value of the property using the yield on the issue as the discount rate.

Private Loan Financing Test

Any bond issue will also be considered a private activity bond if more than the lesser of: (a) 5% of tax proceeds, or (b) \$5 million of the sale proceeds of the issue is used to make or finance loans to persons other than governmental units. A determination of a loan is based on the substance of the transaction.

Effective Date

The proposed regulations are generally effective for bonds issued on or after the date 60 days after publication of final regulations. Taxpayers will be able to apply the regulations in whole, or in part, to bonds issued after December 30, 1994 and before the effective date, and to refunding bonds issued after the effective date. For any bonds issued prior to December 31, 1994, prior law continues to apply. This effective date rule will not offer relief for new management contracts for existing, older facilities.

Summary

Although the proposed regulations offer a more liberal interpretation of the private business test as it relates to management contracts, there are still some open issues that must be resolved. The regulations are lengthy, complex, and still controversial. Utilities considering the possibility of managing municipal facilities must carefully and creatively structure the contract to achieve the desired results. ♦

Transfer of Water System to a Utility is a Contribution to Capital

by James E. McDole
Jorge Caballero

Deloitte & Touche, Parsippany, New Jersey

In a recent Private Letter Ruling, the Internal Revenue Service ruled that the transfer of facilities that were to be used to provide public fire protection and an alternative source for water service is a contribution to capital and therefore not taxable currently (PLR 9410018).

Background

The taxpayer is a public water utility that serves a number of cities and unincorporated communities. One particular town which receives part of its water service from the utility requested a proposal from the utility to serve those parts of the town where there is currently no public water supply. The town made the request because it wished to provide public fire protection as well as an alternative water source to that part of town that did not have public water service.

In response to the request for proposal, the utility prepared a proposed water distribution system layout and cost estimate and indicated that it was unwilling to pay for the improvements because it could not be justified from an economic standpoint. It was decided that the two would raise the necessary funds for the water service expansion by issuing general obligation bonds which would require it to retain legal ownership. The town would lease the facilities to the utility on a long-term basis for a nominal charge and the utility would supply water through the leased system and perform all necessary, administrative, operational and maintenance functions with an option to purchase the facilities at anytime after the bonds ma-

ture or in the event of default. The utility conceded that from a tax perspective transferring the benefits and burdens to the utility would be considered a contribution of the facilities to it. The town would grant the utility a water service franchise within its town limits but the potential customer would be under no obligation to purchase water from the utility. The utility would not earn a return on the facilities because it would have no investment in them. It is also anticipated that the availability of a public water system and a better fire protection system would encourage economic growth within the portion of the town serviced by the new facilities.

Analysis and Conclusion

The Internal Revenue Code provides that in the case of a corporation, gross income does not include any contribution to the capital of the taxpayer providing it is not determined to be a contribution in aid of construction or a contribution as a customer or a potential customer. IRS Notice 87-82 provides an exception relating to transfers determined to not be CIAC's if they do not reasonably relate to the provision of service or for the benefit of the person making the payment but rather relate to the benefit of the public at large.

The IRS indicated that in the instant case the contribution to the utility for fire protection improvements will clearly benefit the public as a whole and that the improvements will not be made for the direct benefit of any particular customers of

the utility in their capacity as customers but rather reduce the threat of damage by fire and improve the economic possibilities for the town and surrounding community. Although some of the residents may choose to be connected to the public water system they are under no obligation and there is no assurance that the expansion of the water facilities will produce additional customer to the utility.

Accordingly, the IRS ruled that the deemed transfer of facilities to the utility will be treated as non-shareholder contribution to capital and therefore not included in gross income of the utility.

It is evident that each facility transfer has to be reviewed on the specific facts and circumstances in order to determine if it should be included in gross income. In the instant case, even though some of the elements in determining a transaction to be taxable as CIAC were present (i.e., potential for future customers and indirect contributions from current and potential customers in the form of increased tax assessments), the overriding determination was that the transfer benefited the public at large and, therefore, met the exception related to inclusion in gross income. The potential arrangements regarding transfers of facilities should be reviewed carefully and structured in a manner so that they may be properly excluded from gross income even though some of the CIAC characteristics may be present. ■

Excerpted from Deloitte & Touche, Public Utility Executive Briefs.

corporate changes

BHC Announces Exec. Appointments

Aquarion Company has announced that its Board of Directors elected James S. McInerney Jr. president and chief executive officer of Aquarion's largest subsidiary, Bridgeport Hydraulic Company. McInerney had been president and chief operating officer. He succeeds as CEO Jack E. McGregor, who continues as chairman of the board, BHC, as well as president and chief executive officer of Aquarion.

The Board also elected Charles V. Firlotte senior vice president and chief operating officer of BHC. Firlotte, had been vice president, operations for BHC since 1992, with responsibility for supply operations, engineering management, water quality control services and environmental management in addition to customers and administrative services. He

continues as vice president, administration and human resources for Aquarion, a position he has held since 1991.

"The Board's actions signify its confidence in Jim and Chuck's ability to continue to lead BHC through a period of unprecedented change in the water industry," McGregor said. "Both have played major roles in BHC's success in recent years, and will continue to do so as we look to further grow the company through capital additions and acquisitions of other water companies." McGregor noted that BHC is in the midst of the largest capital spending program in its 138-year history as a result of more stringent federal drinking water regulations.

McInerney has headed Aquarion's public water supply operations since 1990, when he was elected executive vice presi-

dent and chief operating officer of BHC. He was elected president of BHC in 1991, and was elected senior vice president, utilities group, for Aquarion in 1992. McInerney is a registered professional engineer and a graduate of Manhattan College, where he received a bachelor's degree in civil engineering. In 1991, he graduated from Harvard Business School's Advanced Management Program.

Firlotte joined BHC in 1987 as director of human resources and administrative services and was promoted to vice president in 1988. Before joining BHC, he was director of human resources and labor relations at Combustion Engineering Canada. He is a graduate of St. Thomas University in New Brunswick, Canada, and received a master's degree in social sciences from the University of Ottawa.

Cirello Named SSU President

John Cirello has been named President and Chief Executive Officer of Southern States Utilities, Inc. (SSU) in Apopka, Florida. The company is Florida's largest privately-owned water and wastewater utility, serving more than 140,000 customers in 25 counties.

He will also hold the titles of Executive Vice President of SSU's parent company, Minnesota Power; Chairman of Heater Utilities, Inc. in North and South Carolina; and Board member of Topeka Group Incorporated. Heater Utilities and Topeka Group are also subsidiaries of Minnesota Power, located in Duluth, Minnesota.

Dr. Cirello previously served as President at Metcalf & Eddy Services, Inc., a leading national contract operation firm located in Branchburg, New Jersey. He

also held executive positions at Chemical Waste Management; International Technology Corporation; and Princeton Aqua Sciences. At Metcalf & Eddy Services, he gained extensive experience in contract operation services.

This experience will serve Dr. Cirello well at SSU, where he will be tasked to take the company into new business ventures. "We need to take advantage of our size," said Dr. Cirello.

Another main focus for Dr. Cirello will be to strengthen customer relations. "The way you treat your employees will be the way they treat their customers," said Dr. Cirello. "Our customers and employees will always be treated with respect and kindness . . . and shown enthusiasm and interest."

NW Indiana Names New VP

Northwest Indiana Water Company announced its appointment of Richard D. Carroll to the position of Vice President—Administration and Controller. Larry A. Hensley, President and General Manager, stated Carroll's responsibilities will include the day-to-day management of the customer service, accounting, human resources and information systems departments of the company. Carroll was graduated from Marquette University with a Bachelor's of Science Degree in Accounting. He also earned a Masters Degree in Business Administration from DePaul University in Chicago. He has 10 years of professional experience in growth-oriented manufacturing companies, including leveraged financing and plant expansions. Carroll is a member of the Illinois CPA Society and of the American-Institute of CPA's.

SCWC Elects New Board Members

Following the 1995 Annual Shareholder's Meeting, William V. Caveney, Chairman of the Board of Southern California Water Company, announced the retirement of Donald E. Brown from the Board of Directors and the election of three new Board members: Mrs. Jean E. Auer, Mr. Robert F. Kathol and Mr. Lloyd E. Ross.

Brown, a resident of Omaha, Nebraska, and Senior Vice President of Kirkpatrick, Pettis, Smith, Polian Inc., joined the Board of Directors in 1971, serving as a member of the Audit and Finance Committees. During his tenure, Brown provided invaluable assistance in guiding the corporation through a period of significant change in the structure, operation and regulatory environment of not only the Corporation but the investor-owned utility industry in general.

The Board voted last year to increase the membership as part of an overall plan to expand the Board's geographic representation and expertise. The three new members bring the total number of Board members to seven.

Jean E. Auer has more than 25 years of leadership service and involvement in California water issues. She has served as

a consultant to California Leadership Water Class, training emerging minority leaders on water issues, and as a public involvement consultant to the San Francisco Estuary Project. She served as the Public Member of the State Water Resources Control Board for five years and on two Regional Water Quality Control Boards. In 1991, she was also President of the Commonwealth Club of California. Last November, in recognition of her "innovative leadership and outstanding contributions to the Department's water resources and reclamation missions over two decades," Mrs. Auer was granted the Conservation Service Award of the Department of Interior. Mrs. Auer and her husband, Carl, have three grown sons and live in Hillsborough, California, where she serves on the Town Council. She graduated from Ohio University *cum laude*.

Robert F. Kathol joined Kirkpatrick, Pettis, Smith, Polian Inc., in 1971 and is currently Executive Vice President and Director of Investment Banking. He is a member of the Nebraska Society of CPAs and the American Institute of CPAs, is a past president and board member of the Nebraska Securities Industry Association,

and serves on the National Government Relations Committee of the Security Industry Association. Kathol also serves on the Boards of Carlson Systems, Inc. and the Nebraska Independent College Foundation, and is an Advisory Board Member of Norwest Bank/Southwest. A graduate of Creighton University, Kathol attended the Securities Industries Institute at The Wharton School as well as numerous seminars on all aspects of investment banking.

Lloyd E. Ross is President and C.E.O. of SMI Construction (SMI) in Irvine, California. Ross began his career with SMI in 1961, served in numerous management positions, and attained his present position in 1976. Born and raised in Colville, Washington, he moved to California in 1959 to attend Citrus College in Azusa. Currently, Ross is a Member of the Board of Directors of PacificCare Health Systems, serving on the Audit, Real Estate and Compensation Committees. He was also a member of the California Chapter of Young Presidents Organization (YPO) from 1981-1991, serving as Chairman in 1986 and as Chairman of the Pacific Area Conference YPO in 1989.



Jean E. Auer



Robert F. Kathol



Lloyd E. Ross

United Water Names Gerber, Jr., VP



Robert A. Gerber, Jr., has been named vice president—corporate law for United Water Management & Services, a subsidiary of United Water Resources. In this capacity, Gerber will oversee corporate government matters and will be responsible for the legal aspects of the company's finance matters and acquisition and diversification activities.

"Bob had distinguished himself during his seven years with our company," said Donald L. Corell, chairman and CEO. "His valuable legal guidance has helped United Water become the nation's second largest investor owned water services com-

pany. His input will become even more important as we continue to break new ground in the water services industry and pursue our mission to become the nation's premier water company."

Gerber joined the company as assistant corporate attorney in 1988 and was promoted to corporate counsel in 1992. Prior to that he was with the law firm of DeForest & Duer. A graduate of Western Maryland College, Gerber holds a law degree from Rutgers University. He is a member of the New Jersey Bar Association, the American Bar Association and the American Corporate Counsel Association.

New Officers at York

The York Water Company's Board of Directors, at the annual organization meeting, approved changes to the company's organization structure. William T. Morris, the company's President and Chief Executive Officer, announced the Board's action as follows: Irvin S. Naylor continues as Chairman of the Board; Horace Keesey III was elected Vice Chairman of the Board; William T. Morris continues as President and will also be Chief Executive Officer; Robert E. Skold continues as Secretary/Treasurer; Jeffrey S. Osman was elected Vice President-Finance; Jeffrey R. Hines was elected Vice President-Engineering; Duane R. Close was elected Vice President-Operations; Albert J. Shultz was elected Vice President-Human Resources, and Lois L. Shultz was elected Assistant Secretary/Assistant Treasurer.

Messrs. Osman, Hines, Close and Shultz are all long-term managers of the company who were elevated to Vice Presidents in recognition of their contribution to the success of the company. Mrs. Shultz is the company's Customer Service Manager and was the company's Assistant Secretary.

Spears Joins Citizens

Citizens Utilities has announced that Ronald E. Spears has joined the company as Vice President, Telecommunications. Spears will be responsible for managing and developing all markets within Citizens' telecommunications sector, including local exchange telephone and long distance telephone services as well as related marketing and sales functions.

Prior to joining Citizens, Spears was a managing director of Russell Reynolds Associates in Chicago. Before that, he was chairman and chief executive officer of Videocart, Inc. in Chicago.

From 1979 to 1990, Spears was associated with MCI Telecommunications. After joining that company's engineering department, Spears was promoted in 1982

to director, network engineering. He later became senior vice president of Western Union International and, in 1984, was promoted to president of MCI Midwest, responsible for forming one of the seven operating divisions MCI used to manage its Equal Access marketing efforts. Earlier in his career, Spears was employed by AT&T Long Lines.

Spears is a graduate of the United States Military Academy at West Point, where he earned a B.S. degree in Electrical Engineering, and of Western Kentucky University, where he received an M.P.S. degree. He served in the United States Army for eight years, including a tour of duty in Vietnam and as an instructor at West Point.

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CWC Employees Elected To, and Recognized By Water Industry Associations

At the Annual Conference of the Connecticut Section of the American Water Works Association and the Connecticut Water Works Association (CWWA), held May 24-26, several employees of The Connecticut Water Company (CWC) were elected to represent Connecticut's water industry. Combined, public water suppliers in Connecticut provide drinking water to over 700,000 customers or a population of over 2 1/2 million people in the state. The two professional organizations provide technical support, research assistance and policy direction on water quality issues as well as represent the industry on regulatory and legislative matters affecting the industry.

Maureen P. Westbrook, Director of Government and Public Affairs, was elected Chair of the Connecticut Section AWWA; Terrance P. O'Neill, Vice President of Operations, was elected as National Director for the Connecticut Section AWWA; while Barbara Redmond, Collection Manager was elected as Director to the Board of CWWA.

In addition, William F. Guillaume, CWC's Vice President of Engineering and Planning, received the George W. Fuller Award from the American Water Works Association (AWWA) during the joint conference. The Fuller Award is presented annually to executives in water supply management and engineering fields who have proven themselves as outstanding

and extraordinary leaders. Honorees for this prestigious award, the highest awarded within the industry association, are chosen by their peers.

Guillaume began his career at CWC in 1965, initially working as the company engineer and eventually assuming responsibility for many of the projects and plans that has ensured the continued sources of water supply for the company's customer. During his employment at CWC, he has held several key positions in state and national water utility industry associations, including Chairman of the Connecticut Section AWWA and President of CWWA. Guillaume continues to serve as a member of several AWWA Committees.

BHC Selects New Customer Information System

Bridgeport Hydraulic Company contracted with Orion Group of South Bend, Indiana, to install an entirely new software system. The system will provide major improvements in customer service, billing and general accounting. The \$1.8 million contract covers the software, installation and training over the next 18 months.

"We estimate complete payback of our investment in less than two years," proclaimed BHC's Dan Neaton, VP Planning. "The coupling of a proven and fully developed relational database with powerful modular software packages gives us great confidence in our selection," he added.

BHC specifications called for a state-of-the-art open system solution that could

take advantage of their existing hardware yet provide a clear path to today's improved cost/performance hardware in the future. Their focus was on improving customer service and to allow them to schedule service resources with quick responses.

BHC's service call program is intent upon being able to track, react and predict. With Prophecy and FMMS's functionality, BHC will have the ability to allocate resources and schedule the customer at the time they log the service request. They seek to automate most of their current highly manual tasks. Their ultimate aim is lower cost of operations which will minimize future rate increases.

They cite the benefits as better collec-

tion, control and visibility of data. It will allow BHC to more closely monitor consumption rates and patterns of repairs, and reduce service calls through better diagnosis. As a result of the new installation, more BHC employees will have more access to more information than ever before.

Prophecy and FMMS (Facilities Maintenance Management Software) offer a simple user interface and increased visual indication of trends and data. It allows all top executives of the company to have easy access to key data as both summary and detail.

The installation is scheduled for completion in April 1996.

EMA Services Celebrates Twenty Years

EMA Services, Inc. celebrates its 20th anniversary this year. Founded in 1975, EMA specializes in information and control technology consulting for water and wastewater industries. The firm began in St. Paul with a small group of engineers working on an automation project for the Metropolitan Council Wastewater Services (then the Metropolitan Wastewater Control Commission). Today, EMA has offices nationwide as well as in Canada and the United Kingdom.

In recent years, EMA has guided the planning, design and implementation of an integrated information and control system for one of the nation's largest wastewater treatment projects—cleaning up Boston Harbor. When completed, the new Deer Island Treatment Plant will process wastewater for 2.5 million people and

3500 businesses.

EMA is also actively involved in the research of new technology applications for the water/wastewater industry. This currently includes a leadership role in two projects: building on electric utility work in reducing water utilities' energy use, and developing an object technology method for transportable software modules. These projects will help utilities optimize operations and reduce costs. Following a similar theme, there is a focus on helping utilities increase productivity by adopting new operating paradigms.

In twenty years, EMA has evolved from process control consultants to information and control technology specialists. That success is based on an approach which balances the cost/benefit of technology with the clients' needs.

Sewer Billing Service & O&M Agreements

Northern Michigan Water Company, serving 3725 customers in the Upper Peninsula of Michigan, is the largest investor owned water utility in the State of Michigan. The company has been providing water service to Calumet, Laurium and surrounding communities in the northwest corner of Michigan's Upper Peninsula for the past 34 years. The Keweenaw Peninsula is well known for its copper mining heritage and scenic beauty with dense second generation forests and miles of shoreline bordering Lake Superior.

In addition to providing water service, the company provides billing and collection of sewer service charges to customers of six independent villages, townships or sewer authorities, ranging from 125 to 2700 customers in size. The services include billing, collections of bills, accounting reporting, and in certain cases tracking the customer's usage so maintenance of certain facilities such as septic tanks can be performed on a timely basis.

The company also has several lease and O&M Agreements with local municipalities. These Agreements provide for operation of several municipally owned distribution systems that are integrated with the company's system. Several of the lease and O&M Agreements have been in place for over 30 years.

By providing these services, the company has demonstrated the cost effectiveness of private-public partnerships in providing low cost utility services to its own customers as well as municipal sewer customers.

Missouri-American Bills for City

Missouri-American Water Co., committed to playing an integral role in each community it serves, has helped the city of St. Joseph to collect nearly \$250,000 in delinquent sewer bills over the last 12 months.

An agreement between Missouri-American and the city is allowing the municipality to collect delinquent sewer bills by disconnecting water service of customers who don't pay up. For years, many people avoided paying the sewer charge because the city disliked its only—and expensive—recourse of digging up sewer lines. As a result, the city has lost well over \$1 million in revenue.

"Now instead of digging up sewer lines, we have a much more effective way of collecting the bills," said City Manager Pat Lilly. The Missouri Public Service Com-

mission, which regulates Missouri-American, approved the agreement in January 1994.

"We recognize that it is a benefit to the city and to the residents of St. Joseph," said Bill L'Ecuier, vice president and manager of Missouri-American. "We consider it a part of our responsibility."

Under the agreement, the city notifies Missouri-American of delinquent sewer customers. Missouri-American then contacts customers by certified letter warning them that their water will be disconnected if they fail to pay the delinquent sewer bill. Missouri-American receives a fee to cover the cost of disconnecting and reconnecting service. The majority of delinquent sewer bills are paid, however, and only about 20 customers have had their water disconnected.

BHC's Easton Plant Receives Engineering Award

Bridgeport Hydraulic Company's Easton Lake Reservoir Water Treatment Plant on April 22 placed third in the New York Association of Consulting Engineers' (NYACE) 1995 Engineering Excellence Competition.

During a "Black Tie" dinner and ceremony at the Waldorf Astoria, NYACE officials commended design firm Hazen & Sawyer of New York and BHC for the facility's efficient design. The project was submitted to the competition by Hazen & Sawyer. Gilbane Building Company of Glastonbury, Connecticut, was construction manager for the Easton Facility.

BHC President and Chief Operating Officer James S. McNerney, who accepted the award, said the recognition is "a tribute" to the combined effort of the design engineering firm, construction manager and BHC personnel. "What resulted was a value-engineered product that is environmentally compatible with the surroundings, operationally cost effective and functionally efficient," he stated. "It's an honor to have been part of the team that is responsible for this award."

The \$27 million state-of-the-art facility is designed to treat a maximum of 20 million gallons of water per day from the Easton Lake Reservoir and, on average, provides about 12 million gallons per day

to customers in Easton, Fairfield, Monroe, Shelton, Trumbull and areas of Bridgeport and Fairfield.

The treatment plant is BHC's third, and the first of four the company is building during this decade to meet the requirements of the 1986 amendments to the federal Safe Drinking Water Act.

BHC's \$50 million Hemlocks Facility in Fairfield, scheduled for completion in 1997, was also designed by Hazen & Sawyer. The Easton plant was put in service on June 22, 1993. BHC is also building two smaller facilities at Lakeville Reservoir and Lake Waugum in Litchfield County. According to McNerney, "We're committed to providing a safe, reliable water supply at an affordable price. This plant is like a \$27-million insurance policy against waterborne disease."

McNerney said BHC will continue to utilize the same sound principles of engineering, construction and management in designing and building future filtration projects.

Located off Buck Hill Road in Easton a 10-acre site south of the dam at Easton Lake Reservoir, the plant includes a 58,000-square-foot treatment building, two three-million-gallon water storage tanks and two pump stations. The facility is highly automated and is monitored 24 hours a day by computer.

Outdoor Water Survey Offered by LIWC

Long Island Water Corporation and Cornell Cooperative Extension of Nassau County have teamed up to offer water company customers free outdoor water surveys for water company customers who qualify.

"The surveys provided by the Cooperative Extension will show customers how they are using water outdoors," stated Donald Abrew, vice president-conservation officer for Long Island Water. "The key to successful outdoor water conservation is to convince customers that it is possible to have a green landscape without using more water than necessary."

The audit includes:

- an evaluation of the efficiency of sprinkler systems and recommendations for proper scheduling,
- an inventory and evaluation of the landscape including the lawn,
- suggestions for plants and shrubs that minimize water use, and
- a free rain shut-off switch for participating in the audit.

To determine the efficiency of sprinkler systems, a Cooperative Extension horticulturist visits the customer's home a minimum of two times to conduct on-site inspections, take soil samples, note the types of shrubs and trees on the property, and determine the number and type of sprinkler heads used in each sprinkler zone.

"Reducing the amount of water that is used in the landscape definitely will conserve our precious natural resource, and can save customers money as well," commented Donald Abrew. "We feel the one-on-one interaction between the customer and the Cooperative Extension horticulturist will foster the behavior changes needed to help customers to conserve."

Cal Water Gets Contract

California Water Service Company announced it has signed an operation and maintenance agreement with the Board of Directors of the Rancho Verdugo Mutual Water company for the operation of the water system. Rancho Verdugo, a small, mutual water system on the westside of Bakersfield, will retain ownership of system assets.

"This agreement will greatly benefit the customers of Rancho Verdugo," said Mel Byrd, Manager of Cal Water's Bakersfield District. "They will retain ownership of their

facilities and see their monthly water bills drop nearly five percent. They will also receive around-the-clock service from the state's largest investor-owned water utility with its own water quality laboratory, engineering and other support staff. With Cal Water as the operator, the customers of Rancho Verdugo will continue to receive the same high quality service they have enjoyed in the past." Cal Water began operating Rancho Verdugo Mutual Water Company on June 1, 1995.



SOUTHERN CALIFORNIA WATER COMPANY

The First Sixty-Five Years

*by Charlotte St. John
Public Affairs Manager*

Diversity and Tradition

Whether you talk to the "old timers" or the "new kids on the block" about Southern California Water Company, they all come back to two major themes: one is diversity—diversity of geography, climate, water supply, systems, and communities; and the other is tradition—a tradition of excellence in customer service, employees, and financial stability.

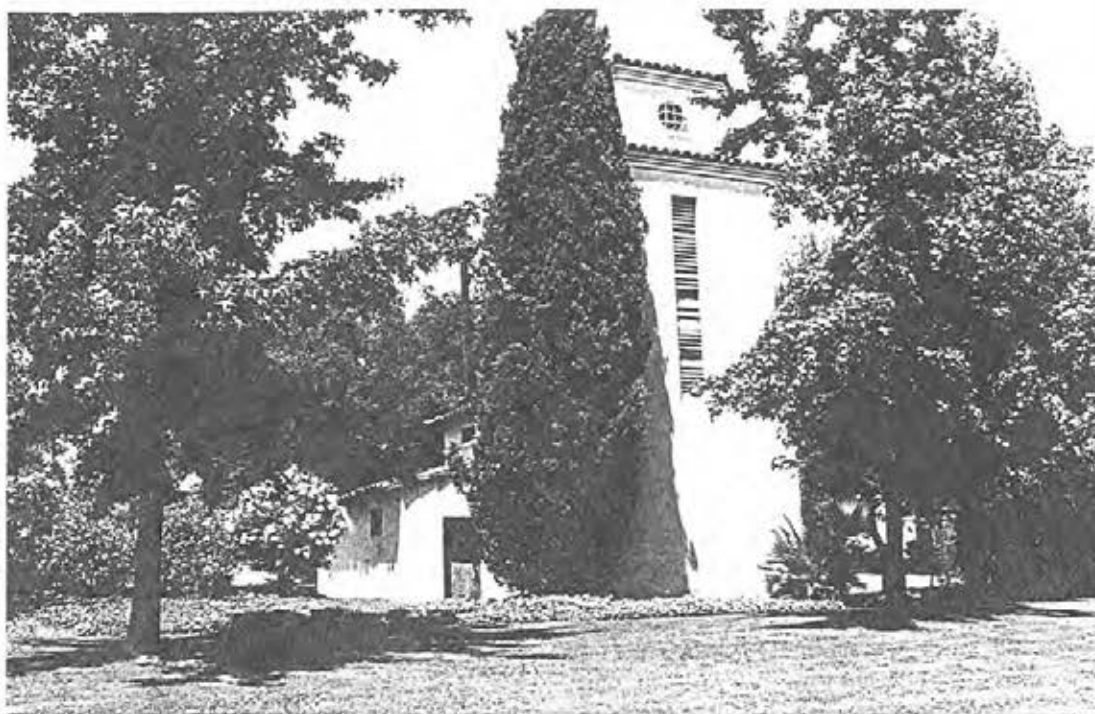
We'll start with diversity. The name itself—Southern California Water Company—betrays its own diversity. First of all,

Southern California Water Company's operations extend throughout California, in 75 communities, within ten counties, with 41 different water systems. More than 700 miles separates its northern-most mountain community of Clearlake, to its southern-most, Calipatria, located in the remote desert near the Mexican border. And the company actually provides water and electric services. More than 20,000 customers are served by the company's Bear Valley Electric Service. In its early days, the company also provided

telephone and gas services and operated a busy ice plant. The company also has the dubious distinction of charging rates which are among both the highest and the lowest in California.

One system sits at 7000 feet above sea level (Bear Valley Electric) and another at 185 feet below sea level (Calipatria). One area regularly experiences 110 degree temperatures (Barstow) in the summer while another frequently gets below freezing in the winter (Wrightwood). The company provides services in the hustle-bustle of urban areas, in

Shown today, the Fair Oaks Plant was built in 1931 to obtain additional supply for the City of Claremont. Because it was located on the campus of the Claremont Colleges, the derrick, forebay tank and booster pump were enclosed to blend with the campus architecture



the spectacular beauty of the central coastal regions, and the serenity of the high desert and mountain communities.

Even the water supply is diverse: some areas depend entirely on wholesale supplies, some on company wells; some areas draw from rivers or lakes; and some supplies are a combination. One resort area with a population of approximately 13,000 swells to over 100,000 during peak weekend periods. The largest integrated system serves 50,000 customers from 19 wells

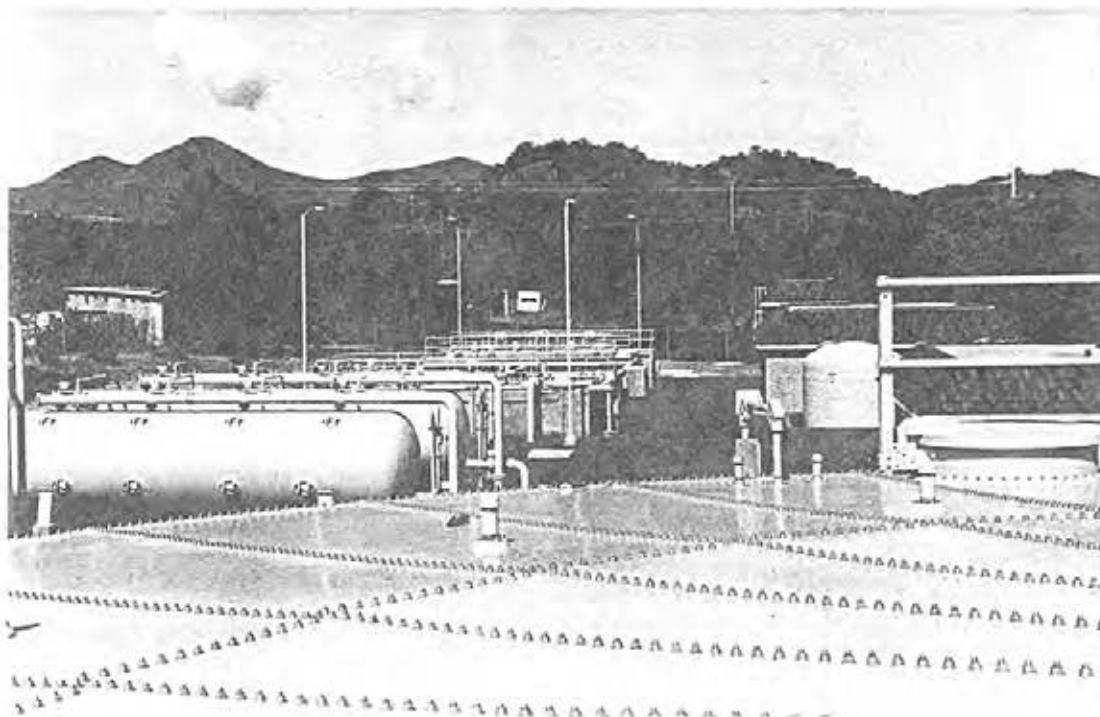
and purchased water, while the smallest system serves only 39 customers with two wells.

The traditions may be less tangible, but they are no less real. Take customer service for example: more than fifty years ago, the company's employees were being encouraged to:

"... remember that we are a Public Service organization. . . . Every phone call you answer, every cus-

tomers you talk to . . . every public contact you make in your daily routine of business presents an opportunity to strengthen those relations. Each of us, no matter what our position, is Southern California Water Company, and by our courtesy, efficiency and thoughtful handling of the immediate problem at hand, we collectively build that foundation of any service organization—public good will."

(continued next page)



Completely automated, the Senoma Water Treatment Plant in Clearlake was put into service in 1992, with a capacity of 2.2 million gallons per day. Earlier this year, the company signed an agreement to treat 400,000 gallons per day for the Highlands Mutual Water Company.

SCWC, continued

Today, that commitment to customer service underlies every activity and operation within the company. The corporate mission statement says it best:

"... The Company is committed to providing quality service to its customers at the lowest cost, consistent with fair treatment of shareowners, employees and the communities its serves ..."

Other traditions are numerous. One is the company picnic, which first took place in 1931 and continues to this day. The event is always held at a local park—a day focused on the children and filled with food, fun, games, rides, prizes, surprises and always a "gong show."

Another is the employee newsletter: the first "Bulletin" was published on November 15, 1940, and consisted of three typewritten pages and hand-drawn art work. Full of personal anecdotes, corny stories, touching poems, funny or serious editorials, and articles, there is a strong sense of company as "family." Today the newsletter is called "connections," and it continues the 55 year tradition of recording the company's people, activities and progress.

Another tradition: the company's Employee Suggestion Program. First an-

nounced in 1940, the program offered a cash award of "... \$10.00 to any employee who sends a worthwhile suggestion that can be put to use profitably." (Note: in 1994, SCWC received its first NAWC Management Innovation Award for the company's new employee suggestion program—"a Bolt out of the Blue.")

There are also company-sponsored teams, special events and community projects such as "Operation Gobble," a relatively new tradition. Each year for the past five years, SCWC has joined other California water companies in distributing turkeys to charitable organizations. This year, more than 25,000 turkeys were provided to help those less fortunate enjoy Thanksgiving dinner.

Financial stability and steady growth have been the company's hallmarks, providing shareowner dividends for 65 years and increased annual dividends each year for the last 41 consecutive years.

On December 31, 1994, the company completed its 65th year of providing quality water and electric services to Californians. SCWC also marked a number of all time highs with total operating revenues at \$122.7 million, total assets at \$383.6 million, and total capitalization at \$214.0 million. And despite the lower authorized returns, 1994 earnings solely

from operations tied 1991 as the third highest in the company's history; the first and second highest being 1992 and 1993, respectively.

Today, the company provides service to 258,242 customers—over a million people, or one of every 30 Californians—making it the second largest investor-owned water utility in California and the fifth largest nation-wide.

President and C.E.O. Floyd E. Wicks likes to say SCWC is "just a big company made up of lots of small companies." And, actually, that's what it was in the beginning as well—a group of diverse systems, brought together and consolidated under one operation company. Which brings us to the beginning.

"Our Lady the Queen of Angels"

Founded in 1781, the City of Los Angeles began its interesting history as a small Spanish Pueblo named to honor "Our Lady the Queen of Angels." Because early settlements had to be located near a reliable water source, the site chosen for Los Angeles was just below the narrows of what was to become the Los Angeles River. The ditch that was built to carry water from the narrows to that small pueblo continued as the water supply throughout the 19th Century.

In the late 1800's, the settlement and growth of communities in California had been—in nearly all cases—preceded and accompanied by the organization of privately-owned water companies. Only Sacramento started out with its own municipal waterworks. However, the post World War I boom found most private water distributors in Southern California unable to cope with the rapid growth. As a means to resolve this dilemma, many communities chose to incorporate into cities and create their own municipal water departments, financing the acquisition and improvement of the waterworks by issuing municipal bonds.

In spite of this, there was still plenty of room for development, which made for good prospects for private waterworks. Yet no one had put together a group of water properties to be operated under central management, privately-owned and financed. That was where American States Public Service Company (American States) stepped in, confining its early endeavors principally to Southern California.



SCWC's new state-of-the-art Customer Service Center is designed to provide telephone service excellence to customers 24 hours per day, 7 days a week, in English and Spanish. Above, CSR Raquel Munoz reviews a customer's billing and payment history at her submerged-screen work station with ergonomically designed keyboard and chair.



SCWC's Bear Valley Electric lineman David Burks and Service Crew Foreman Bob Bacon tighten hardware on 4KV circuit, high above Big Bear Lake.

American States, incorporated in Delaware on April 16, 1928, with headquarters in Chicago, sent John C. Rath to Southern California to undertake a program of buying water companies. By the end of that year, Rath had acquired 20 separate water companies for American States for a total cost of \$5.7 million. Rath put the deals together with the valuable legal assistance of O'Melveny & Myers—a relationship which continues to this day. At the time, O'Melveny & Myers also handled all matters requiring Railroad Commission approval, the forerunner of the California Public Utilities Commission.

During that same year, another water-related organization came into being: the Metropolitan Water District of Southern California (MWD). Initially composed of the City of Los Angeles and twelve other cities, the purpose of MWD was to provide an adequate supply of water for "domestic, industrial and other beneficial uses" to its member cities.

Today, MWD serves about 300 cities and unincorporated areas in a 54,200 square-mile area. Through its 27 member agencies, MWD provides water to more than 16 million people from two sources:

a 242 mile long aqueduct that brings Colorado River water from Lake Havasu to Southern California, and a 444-mile-long aqueduct that carries water from the Sacramento-San Joaquin Delta to state water project contractors throughout the state. Southern California Water Company currently gets approximately 50% of its water from MWD.

On December 31, 1929, American States Water Service Company of California was formed as a subsidiary of American States, consolidating all the California companies into one company with a total of 42,935 water customers.

The Los Angeles Times gave its stamp of approval to the new company on Thursday, May 29, 1930 by writing:

"... the advantages derived from the consolidation and formation of the American States Water Service Company have been many and obvious, resulting in marked reductions in administrative expense, uniform standards of service, increased purchasing power and increased assurance of adequate water supply by interconnection of adjacent systems. . . ."

The Key Property: Los Angeles Water Service

Of all the properties acquired, the one considered to be the keystone was the Los Angeles Water Service Company: it was strategically located, served 7,000 customers, had just completed a series of plant improvements and had "good management," according to Rath. And the price was right: \$637,438. Although a portion of its Eastern Division was within the city limits of Los Angeles, destined later to be sold to the city, the larger portion remained unincorporated and experienced substantial growth. Today, it constitutes the largest customer service area in the company—Southwest—which serves 50,000 customers.

On December 18, 1936, the company name was changed to Southern California Water Company, but it was 1942 before the first Annual Report was published. That year total operating revenues were reported at \$1.5 million, net income at \$212,556, and fixed capital at \$260,530. Of particular concern to the company that year were the restrictions placed on new construction by the War Production

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SCWC, continued

Board as well as growing tax demands. For example, the first year the company paid income taxes was 1935, at 4.28% of operating income. By 1942, that percentage had jumped to 30.6%, causing then-President N. Henry Gellert to thinly veil his concern:

"... in these difficult times... this company can pride itself that its growing earning power has to a considerable extent made possible increasing contributions to the war effort."

In 1947, the company became independent of American States and it was also the year that C.P. Harnish was elected President, serving until his retirement in 1960. It was during Harnish's tenure that the Commission approved the first consolidation of two rate districts: Calipatria and Niland. Today, the company continues to pursue, through the Commission, consolidations of districts for rate making purposes.

The 1954 Annual Report celebrated the Company's 25th anniversary by noting some highlights:

In 1937, the company sold its first public security issue, \$3.4 million of 4½/4% First Mortgage Bonds, followed a year later by a Preferred Stock offering of \$500,000 at 6%.

In 1942, when our country had actively entered World War II, the total number of customers had increased to nearly 57,000.

In 1947, a financial highlight... was the successful consummation of the company's bond financing... of \$5.1 million.

In 1951, the company sold properties and businesses that lay within the city limits to the City of Los Angeles' Department of Water and Power for \$3.3 million and included 30,320 customers—about 31% of the total customers served. The money was promptly reinvested in the remaining growing areas.

In the late fifties, the company actively participated with the West Basin Barrier Project, a unique approach to stop sea water intrusion into the basin. Vice President of Operations Charles Stuart and Chief Engineer Louis Alexander worked with the West Basin Association to drill 14 fresh water wells in a line from the Airport to Palos Verdes Hill. Originally

funded with \$750,000 from the State, the project was turned over and completed by the Los Angeles County flood control district.

According to the 1960 annual report, the company continued to grow steadily, showing the highest revenues, earnings and dividends ever, and a total of 120,500 customers. That year also saw approval of the Feather River Project approved by California voters at a cost of \$1.75 billion, "one of the greatest engineering jobs ever undertaken in the history of civilization," according to Harnish.

Philip F. Walsh assumed the presidency in 1960 and during his 14 year tenure 66,000 customers were added, more than doubling the previous number of customers. Walsh also hired a young engineer named William V. Caveney to manage the company's Rate and Valuation Department. Caveney brought with him more than 15 years of experience as a member of the staff of the Public Utilities Commission. Within one year, he was promoted to Vice President and in 1973 promoted again to Senior Vice President, the year that Walsh died in office and William W. Franklin assumed the presidency.

The 1976 acquisition of California Cities Water was the largest purchase in the company's history. At a cost of \$3.4 mil-

lion, this purchase added more than 22,000 customers in Clearlake, Los Osos, Santa Maria, San Dimas, Wrightwood, and Cowan Heights.

The Fiftieth Anniversary

In 1979, SCWC celebrated its 50th Anniversary with the addition of over 5,800 new water and electric customers and a growth in revenues to a high point of \$32.5 million, or an increase of 10.1% over the previous year. It was also the first year that trichlorethylene (TCE) was discovered in five of the company's San Gabriel Valley wells, a problem that continues to be addressed today.

1980 marked an unusual year for the company as common shares were sold to the public for the first time since 1948. This sale of 550,000 new common shares resulted in an increase of 38% in the number of shares outstanding. 1980 was also the year that saw President and C.E.O. William W. Franklin move up to Chairman of the Board and Caveney elected President. A new era had begun.

SCWC's Most Valuable

Resource—It's People

In 1990, the Board of Directors elected Caveney Chairman of the Board and chose Floyd E. Wicks as its tenth President and



**Empowering Employees to
Learn, Change and Grow**

SCWC University Logo

C.E.O. Wicks currently serves as the Third Vice President of NAWC and will assume the Presidency at the Annual Conference in 1997. Under Wicks' leadership, the company has become more proactive at every level, promoting enhanced customer and employee communications, expanded employee development and training, increased activity with public officials at the federal, state and local levels, and more open dialogue and effective communication with regulators.

For example, in response to a management audit of the company's entire operations conducted by the California Public Utilities Commission in 1993, the company initiated an aggressive in-house planning process involving dozens of employee work teams to address each of the 114 recommendations—an effort that resulted in "The Plan for Service Excellence." The "Plan" now serves as the blueprint for guiding the company into the 21st Century, and Wicks likes to say that the audit was "the best thing that has happened to this company."

The company takes pride in its most valuable resources: its people. Employees are being motivated and empowered by a company-wide focus on employee development through aggressive in-house "Train the Trainer" opportunities, Management Development programs and technical training. The SCWC "University"—established in 1993—encourages employees to "... Learn, Change and Grow" by providing regular classes in everything from meter reading to water quality to quality customer service.

All efforts have been focused on improving customer service, developing employee potential, enhancing communications and positioning SCWC for future growth and expanded operations activities. For example, the company recently entered into a maintenance and operation services contract for West Basin Municipal Water District's reclaimed wastewater pipeline system. That means SCWC is now a water, electric and reclaimed wastewater utility.

The foundation of providing service excellence is formed by focusing on customer satisfaction—understanding what customers value—then finding ways to competitively and profitably provide the products and service they desire. The company's 1995 Business Plan states:



Pump mechanic John Tracy Lyon installs a new motor at the Rolling Hills #1 pump Los Osos. Though not visible, the motor is being dropped into place by a helicopter due to the inaccessibility of the location of the pump.

"... There should be no mistake that SCWC is a Company driven by a focus on providing excellence in customer service ..."

Towards that end, the company recently redesigned its organization to move operations closer to the customer through the establishment of three regions, eight districts and 22 customer service areas. A Vice President of Customer Service was placed in charge of each Region.

Region I is headed up by Donald K. Saddoris, a veteran SCWC employee with 27 years of service. More than 49,000 customers are served in Region I, which is divided into two Districts. The Northern District is managed by John Redding and includes the following Customer Service Areas: Arden-Cordova, Bay Point and Clearlake. The Coastal District is managed by Mikel Hartsock and includes four Customer Services Areas: Los Osos, Ojai, Santa Maria and Simi Valley.

Thomas J. Bunosky leads Region II, which is located in Los Angeles and Orange Counties and includes our largest customer base with 136,272 connections.

There are two Districts in Los Angeles: Southwest District, managed by Granville "Rusty" Hodges, and Central District, managed by Ronald E. Mullen. Southwest is considered one Customer Service Area, but is, in fact, our largest system serving close to 50,000 customers. Central District includes three Customer Service Areas, Central Basin East, Central Basin West and Culver City. The Orange County District is lead by Patrick R. Scanlon who's responsible for the Placentia and Los Alamitos Customer Service Areas.

Region III includes the largest and most diverse geographic areas with 72,834 customers in nine Customer Service Areas. Joel A. Dickson heads up the region, which includes three Districts: Foothill District, managed by LeRoy Barker, serving Claremont, San Dimas and San Gabriel Customer Service Areas; Mountain/Desert District, managed by Perry Dahlstrom, serving Apple Valley, Barstow, Calipatria, Morongo and Wrightwood Customer Service Areas; and Bear Valley Electric District, headed by Roger Kropke.

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SCWC, continued

The management team is rounded out with James B. Gallagher, Vice President—Finance, and Chief Financial Officer and Secretary; Randell J. Vogel, Vice President—Customer and Operations Support; and Joseph F. Young, Vice President—Regulatory Affairs, Government Relations and Conservation.

This new organization also shifted a number of support functions directly to the regions, such as engineering, water resources, construction, production and purchasing. At the same time, a new, centralized Customer Service Center was established at the General Office to provide a higher level of service to customers contacting the company by phone—24 hours a day, 7 days a week—in English and Spanish—the first investor-owned water company in the state of California to do so. We are also establishing a reciprocal agreement with another major California water company to provide back-up customer service in the event of natural disaster.

SCWC's newest employee focus is called TAP (Teamwork—Action—Progress). TAP TEAMS are designed to enhance productivity, resolve conflict and increase efficiencies at every level of the organization. Created to fine tune the new organization, TAP TEAMS will be unique to each region and will be utilized to work on everything from meter reading to organizational effectiveness to policies and procedures.

The Next 65 Years

Southern California Water Company continues to build on its heritage of providing high quality customer service by ensuring that the company provides the highest value to its customer by delivering the desired benefits at the lowest cost. Value is created by delivering benefits that are worth more to customers than our costs to deliver the benefits. Value can be enhanced by delivering greater benefits at the same costs, the same benefits at a lower cost, or additional benefits worth more than the additional cost to provide them.

Like all California water companies, SCWC must be prepared to address water supply issues. With 271 company-owned active wells, we are balancing our needs and reducing our reliance on purchased water. The water year that ended September 30, 1994 was one of the driest years on record. Since that time, however, precipitation in Southern California has been well above average. But this does not mean that we can ignore conservation. Quite the contrary, SCWC has one of the most proactive conservation programs among investor-owned water utilities in California. We will continue to work cooperatively with other water agencies and local communities to develop expanded conservation programs that encourage more efficient use of our existing water resources.

Water quality issues and environmental regulations continue to require our at-

tention, and costs continue to escalate. As Congress addresses the reauthorization of the Safe Drinking Water Act, we are working closely with others in the industry to support the passage of appropriate and cost efficient regulations. In an effort to work more closely with the U.S. Environmental Protection Agency, the company recently joined a growing number of water purveyors in signing the "Partnership for Safe Drinking Water."

We are also committed to communicating more effectively with our customers and the public about all aspects of their utility service. We are moving to create an internal culture that embraces change, promotes innovation and creativity, encourages taking appropriate risks, and reflects high ethical standards. Change has become a constant as organizational groups throughout the company are challenged to re-think traditional practices and orient activities toward how to best deliver value to the customer.

Today, Southern California Water Company's 463 EMPLOYEES are the primary focus of a company committed to EXCELLENCE IN SERVICE TO CUSTOMERS, COMMUNITIES AND SHAREOWNERS.

In the company's only "official" history, published in 1976, author C.P. Harnish stated: "I hope that . . . it has been made clear that it is our people, the many fine, dedicated men and women molded into an efficient, continuing team, who have made possible the high degrees of success attained."

We couldn't have said it better ourselves!

ACKNOWLEDGEMENTS: The author is indebted to the late C.P. Harnish, former President of Southern California Water Company and author of *Southern California Water Company History, 1928-1974*, published by the company in Los Angeles, California, 1976. She would also like to thank the innumerable former and current SCWC employees who contributed to 65 years of Annual Reports and 55 years of employee newsletters, which were great sources of information for this article. And special thanks to Retired Vice President Charles Stuart for his insight, humor and excellent memory!



In 1957, SCWC's maintenance crews and vehicles lined up for a photo at the Imperial Plant in Norwalk. Today, the company has 234 service vehicles, 80 of which are equipped with Tele-Track systems allowing for immediate location identification.

Dates to Remember

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NAWC

Florida Chapter Meeting
Orlando, Florida
September 13

NAWC Annual Conference
New Orleans, Louisiana
October 29–November 2

California Water Association
BoD Meeting
San Jose, California
September 14

Pennsylvania Chapter BoD
Meeting
Hershey, Pennsylvania
November 15

New Jersey Chapter Meeting
Jamesburg, New Jersey
September 22

California Water Association
54th Annual Meeting
Monterey, California
November 15–19

Pennsylvania Chapter
Annual Meeting and Dinner
Harrisburg, Pennsylvania
September 25

New England Chapter
Meeting
November 17

California Water Association
BoD Meeting
San Jose, California
October 12

New Jersey Chapter Meeting
Jamesburg, New Jersey
November 17

Washington Chapter
Meeting
Fife, Washington
October 17

Florida Chapter Meeting
Orlando, Florida
December 13

Pennsylvania Chapter BoD
Meeting
Hershey, Pennsylvania
October 18

Pennsylvania Chapter BoD
Meeting
Hershey, Pennsylvania
December 13



NARUC

National Regulatory
Symposium on Computer
Information Systems
Colorado Springs, Colorado
October 1–3

23rd Annual Eastern Rate
School
Clearwater, Florida
October 8–13

NARUC Basics of Regulation
and Rate-Making Process
Course
Albuquerque, New Mexico
October 22

107th NARUC Annual
Convention
New Orleans, Louisiana
November 13–16

AWWA

AWWA Distribution System
Symposium
Nashville, Tennessee
September 10–13

