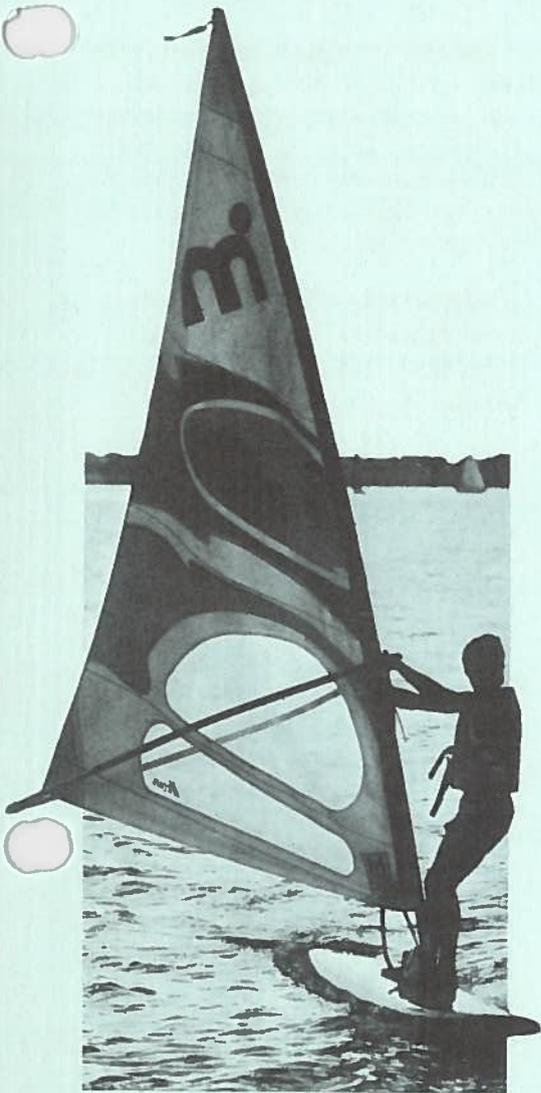


OK

Water

NEWS



MONTHLY NEWSLETTER
OF THE OKLAHOMA
WATER RESOURCES BOARD

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What's Clean Water Worth?

Third draft offers cities options, but requires proof to justify special criteria

Controversy surrounding Oklahoma's Water Quality Standards was quieted, if not quelled, at a January 14 hearing hosted by the Water Resources Board in Oklahoma City. The issue, ignited by introduction of the maligned first draft, had been stirred by central Oklahoma municipalities vehemently opposed to criteria necessitating stronger sewage treatment to deal with ammonia, nitrites, chlorine and dissolved oxygen.

Oklahoma City officials claimed first-draft proposals would have forced \$20 million in modifications to a single plant serving several central Oklahoma communities—increases they said would have been reflected on residents' bills.

To study the costs and benefits of the proposed standards, opponents from Oklahoma City and surrounding towns along with the Association of Central Oklahoma Governments (ACOG) have formed the Clean Water Task Force.

According to Scott Johnson, Oklahoma City manager, the group has hired biologists, ecologists, hydrologists, social economists and lawyers to support the cities in future legal actions. Oklahoma City, Edmond, Nichols Hills, Midwest City, Del City, Moore and Mustang have collected

almost \$200,000 for the group's use. Earlier, the city of Norman voted not to contribute to what some called "lobbying for dirty water" at a December 13 city council meeting. Target of concern for the Task Force is the North Canadian sewage treatment plant at 122nd and Anderson Road, which serves several municipalities.

Opponents of the Task Force question using funds to second guess the Board's expertise and usurp its mandated authority in developing standards. They are also critical of using this money to allow further degradation of state waters. The *Norman Transcript* called the plan "a classic no-win proposition" for Oklahoma taxpayers.

The Water Quality Division is addressing the concerns of the cities. . . .

James Barnett, OWRB Executive Director, said the cities are overreacting and wasting taxpayers' money. He emphasized that the Board's staff was addressing the cities' concerns in the standards process.

The standards undergo at least four drafts, integrating comments from the public and recommendations made by seven committees representing all areas affected by the standards. Stream surveys are made and public meetings are held before the final draft is approved by the EPA, the water board and the Oklahoma Legislature.

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Clean water, from page 1

The Board, as the agency responsible for managing state waters and maintaining the "Oklahoma Water Quality Standards," had drawn strongest criticism over a stringent first-draft ammonia standard. Ron Jarman, chief of the OWRB's Water Quality Division, pointed out that the numerical criterion for ammonia has since been altered—the standards are now in the third draft. He admitted, however, that the standards may cause some headaches for city governments.

"We are trying to improve protection of state streams yet alleviate municipalities, especially small towns, from overly stringent standards that could cause large, unnecessary expenditures of funds," he said.

The third draft allows central Oklahoma cities to have their streams considered individually which could lead to less stringent, and therefore less costly, standards than in other parts of the state. A standard may be lowered contingent upon proof that the change is justified.

At the Oklahoma City hearing, representatives from central Oklahoma municipalities voiced general approval of the third draft, saying that it will save taxpayers millions of dollars. However, environmentalists and some concerned citizens denounced the draft, claiming it would allow further degradation of state streams, especially those in central Oklahoma.

Jarman pointed out during the proceedings that ACOG must still submit data on stream studies it conducted in

order to justify the changes.

Shon Simpson, environmental specialist for the OWRB's Water Quality Division, said that standards for the North and South Canadian Rivers are less stringent now than in 1979.

"In the 1982 standards, ammonia levels were controlled somewhat by the dissolved oxygen standards and were not addressed on their own. Due to the possible implications, EPA required that we place a greater emphasis on the potential toxic effect of the pollutant," he said.

"Also, nitrogen, in the form of ammonia, can be directly toxic to fish and other aquatic life. The decomposition of ammonia stimulates excessive algal growth which may also choke a stream's oxygen supply," Simpson pointed out.

Like ammonia, chlorine can also be toxic to stream life, even at levels safe for human consumption, he added.

"Chlorine is widely used by wastewater facilities for disinfection purposes, but it can also be used to cover up improper treatment. We added the chlorine standard mainly to control over-chlorination of effluent," Simpson said.

One of the biggest changes in the standards is the integration of temperature and flow rate with seasonal dissolved oxygen criteria.

"A high-flow stream at a low temperature has a greater oxygen capacity and can assimilate more waste than a stream with low flow at a higher temperature. Also, we have accounted for natural dissolved oxygen variances

during different times of the year and between night and day," Simpson remarked.

He added that the standards revision also includes a higher dissolved oxygen criterion during spawning season but permits for municipal dischargers will be no more stringent because the cooler water during the spring season naturally holds more oxygen.

Federal intent is to "restore and maintain the chemical, physical, biological integrity of the Nation's waters."

The federal water quality standards program was established by the Water Quality Act, passed unanimously by Congress in 1965. The Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, had the lofty goal of eliminating the discharge of pollutants into navigable waters by 1985.

Congress authorized states to establish their own water quality standards when adopted in accordance with the Clean Water Act and the Environmental Protection Agency. The EPA directs the program and is responsible for approving State-adopted standards.

"We seek to improve state water quality standards as well as state water quality," Jarman pointed out. "And we are continually trying to find new and better ways to arrive at a fair, comprehensive and feasible document."

He added that the revised standards allow for substantially better protection for groundwater, an area of growing importance in state and national water quality.

"The new standards propose great strides forward. They contain criteria changes that should lead directly to improved water quality in Oklahoma," Jarman commented.

The Oklahoma Water Resources Board developed Oklahoma's first



Bob McCoy, left, attorney for the Clean Water Task Force, presents recommendations to panel at January hearing. Seated: Pat Powell of the OWRB; Larry Edmison of the Department of Pollution Control; Water Quality Division Chief Ron Jarman, Hydrologist Main Hutcheson and General Counsel Dean Couch of the OWRB.

standards and beneficial uses for surface waters in 1968, then updated and revised them in 1973, 1976, 1979 and 1982, as prescribed by the Clean Water Act. Revision of the standards can be a tricky business, Jarman said.

"We try to strike a balance between the recommendations of cities, environmentalists, industry, special-interests."

Recently, Attorney General Mike Turpen issued an opinion regarding whether or not Oklahoma may adopt an anti-degradation policy which allows for lower quality or limited degradation of high-quality waters. The attorney general ruled that the quality of these waters should not be allowed to be degraded, but instead, progressively improved through reclassification of waters.

Turpen also ruled that standards for high-quality waters cannot be lowered to justify social or economic needs, although they may exceed minimum standards. Therefore, in the 1985 standards revision, further protection is provided for streams designated as smallmouth bass and trout fisheries. The criteria which protect these fisheries may not be lowered for any reason.

Using the standards as a guide, states formulate National Pollution Discharge Elimination System (NPDES) permits for industrial and municipal waste dischargers. This system, coordinated by the EPA, sets limitations on the amount and quality of effluents from treatment facilities.

In 1978, the OWRB was specifically assigned the duty of issuing permits to discharge industrial wastewater into state waters. An industry's permit specifies the nature and amount of pollutants it may discharge.

Standards guide state and NPDES permits through the wasteload allocation process which determines the probable cause-and-effect relationships of adding pollutants to state waters. Through this process, discharge limits are set and permits are issued to insure that standards are maintained.

Unfortunately, enforcement of the

NPDES permitting program seems to be struggling. A report issued by the EPA and the General Accounting Office in December 1983 concluded that 82 percent of 531 randomly selected industrial and municipal dischargers exceeded their permit levels at least once during an 18-month period. Thirty-one percent of these exceeded permit specifications by 50 percent or more for at least four consecutive months.

The EPA has stated that through stiff enforcement efforts it will require municipal treatment works to meet standards beginning in 1988.

The Standards reflect Oklahoma's interests and attitudes toward preventing, reducing and eliminating pollution.



Bureau Names Commissioner

C. Dale Duvall has been confirmed by the U.S. Senate to serve as Commissioner of the Bureau of Reclamation, replacing Acting Commissioner Clifford I. Barrett. Duvall is a CPA who has filled executive positions in government and the private sector. He is experienced in financial management, construction management and administration.

Barrett, who served in the interim, will return to his position as regional director of the Bureau's Upper Colorado Region headquartered in Salt Lake City.

Board Assists 91 Projects

According to Walid Maher, chief of the OWRB Planning and Development Division which administers the Financial Assistance Program, 91 Oklahoma communities have been approved to receive grants totaling \$6,714,333.

In ceremonies at the Capitol January 29, the Calvin Public Works Authority was presented a check for \$30,000 to begin construction of a new well to replace failed ones.

Maher said cities, towns, rural water districts and other entities are eligible

for the program designed to alleviate emergency sewer and water problems. Grants are funded from interest earned on the Statewide Water Development Revolving Fund.

On January 14, the OWRB approved emergency grants for the community of Davidson and Roger Mills Water, Sewer and Solid Waste Management District #2.

OSU Sets March Meeting

Water supply professionals seeking to operate their municipal water systems more safely, efficiently and economically are invited to attend the Water Distribution Conference in Tulsa March 11-12.

The conference, sponsored by the

Continued on page 4



Oklahoma State University Center for Local Government Technology, will be held at the Tulsa Airport Sheraton. The conference agenda is planned for water distribution supervisors, public works directors, city engineers, distribution maintenance personnel, ru-

ral water operators, city managers and elected public officials.

Registration costs \$90. Further information is available by calling Doug Wright or Sherry Viner, OSU Center for Local Government Technology, (405) 624-6049.

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Pollution
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**ACTIVE CONSERVATION STORAGE IN SELECTED OKLAHOMA LAKES AND RESERVOIRS
 AS OF JANUARY 15, 1986**

PLANNING REGION LAKE/RESERVOIR	CONSERVATION STORAGE (AF)	PERCENT OF CAPACITY	PLANNING REGION LAKE/RESERVOIR	CONSERVATION STORAGE (AF)	PERCENT OF CAPACITY
SOUTHEAST			NORTHEAST		
Atoka	101,800	82.0	Eucha	79,567	100.0
Broken Bow	915,832	99.0	Grand	1,367,360	91.6
Pine Creek	77,700	100.0	Oologah	544,240	100.0
Hugo	157,600	100.0	Hulah	30,594	100.0
CENTRAL			Fort Gibson	344,160	94.0
Thunderbird	105,925	100.0	Heyburn	6,600	100.0
Hefner	72,300	95.9	Birch	17,969	93.5
Overholser	15,200	95.6	Hudson	197,649	98.6
Draper	84,600	84.6	Spavinaw	30,000	100.0
SOUTH CENTRAL			Copan	43,400	100.0
Arbuckle	62,571	100.0	Skiatook	_____	_____ ¹
Texoma	2,516,800	95.0	NORTH CENTRAL		
Waurika	203,100	100.0	Kaw	366,192	85.4
SOUTHWEST			Keystone	616,000	100.0
Altus	30,346	22.0	NORTHWEST		
Fort Cobb	67,457	86.0	Canton	97,262	99.7
Foss	131,494	54.0 ²	Optima	3,000	_____ ¹
Tom Steed	70,547	79.0	Fort Supply	13,900	100.0
EAST CENTRAL			Great Salt Plains	31,400	100.0
Eufaula	2,299,600	99.0	STATE TOTALS		
Tenkiller	625,535	99.0		11,616,670.00	92.8³
Wister	27,100	100.0			
Sardis	261,870	87.0			

1. In initial filling stage
2. Temporarily lowered for maintenance
3. Conservation storage for Lake Optima not included in state total

Data courtesy of U.S. Army Corps of Engineers, Bureau of Reclamation, Oklahoma City Water Resources Department, and City of Tulsa Water Superintendent's Office.

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