Public Hearing: Reclaimed Water for Beneficial Reuse
April 16, 2003
To: The New Jersey Clean Water Council
New Jersey Water Supply Advisory Council

Thank you for scheduling this hearing on reclaiming wastewater and giving water purveyors, consumers and interested citizens the opportunity to express their opinions on this topic. I would like to offer the following statement on behalf of the Association of New Jersey Environmental Commissions (ANJEC), which represents over 2,000 members who serve on municipal environmental commissions in every county of the state.

ANJEC supports the beneficial reuse of wastewater, the protection of groundwater and stream flows and techniques to ensure water supply sustainability. New Jersey needs to use several strategies to address its water supply deficits. These include regulatory changes, capacity-based planning and zoning, water conservation, concrete water allocation limits and beneficial reuse.

The pace of depletion of the State's water resources is alarming. In Cape May County alone, over 5 billion gallons of water per year are pumped into the Atlantic Ocean. USGS research has indicated that water withdrawals for public supply necessary for summer population has caused declining ground-water levels, which in turn has led to salt intrusion and forced closure of wells in Wildwood; Cape May City, the Villas area and threatens other areas in Lower Township. The water supply of the Highlands Region is being impacted by development. Berlin and Burlington County Water Supply Allocation permits are but a foreshadowing of the impending litigation over water supplies in the state.

The NJDEP Statewide Water Supply Plan of 1995 shows that all but one regional planning area has depletive use of their water supplies. In 1990, this same study shows that 18 of 23 RWRPA have depletive surface water usage. The State must require Water Allocation Permits before any new construction begins and the Permits must be based on known quantity. Applicants must be required to submit depletive-consumptive use and environmental impact analyses before they are given water allocation permits. Wastewater Management Plans must be integrated with Water Supply Plans/Allocations and appropriate beneficial reuse so that optimum water quantities and qualities result. Areas in the state that are consistent with Critical Water Supply Area criteria should be deemed to be Critical Areas, with regulatory restrictions implemented.

Municipal approval of development is now the green light for construction to begin; municipalities must know that the development cannot be allowed to begin until the Allocation Permit is received. Each municipality should have a known allocation limit that cannot be changed; the municipality can then zone for the capacity that exists. Consumptive-depletive analyses, public hearings and land use variances could be implemented before new public wells are drilled, in order to ensure adequate supply, which does not harm the ecosystems or existing population. Work must be done with the Board of Public Utilities to revisit water franchises and franchise areas of the private water suppliers who seem more interested in profits than in capacity-based water supply. Beneficial reuse should be a condition for any new allocation permit, with gray water irrigation of landscaping a requisite, as is done in many other states.

The State should stop the practice of giving Water Allocation Registrations. Registrations permit the withdrawal of 99,999 GPD, without analyses of impacts or available quantity, and without any monitoring required. Registrations are being used as permits in New Jersey, and are creating a vast disparity between the recorded and actual water supply usage. Golf courses and other businesses with a known usage well above the allotted amount have been operating with only registration permits.

Shallow pumpage and ground water level declines have reduced the flows to streams and wetlands causing deleterious impacts on these ecosystems. Given that the NJ Water Supply Rules require that no ecological impacts be derived from water supply withdrawals, it is imperative that the NJDEP enforce their regulations and begin a campaign to assist with the building of wastewater treatment and reuse facilities throughout the State. The 1995 NJSWSP indicates that 2003 available water supply resources are falling far short of demand. The larger the depletive use, the greater the negative impacts to the base flow of our aquatic ecosystems. Wetlands are drying up and rivers and streams throughout New Jersey have reduced base flow. Maintenance and restoration of the base flows, while maintaining water quality, is crucial to the ecosystems and to the fishing industries.

Beneficial reuse on the scores of golf courses in New Jersey can alter the predictions of future water supply deficits throughout the state. The water supply requirement for one New Jersey golf course is a minimum of 200,000GPD to 1,000,000GPD during the summer months. Infrastructure could be in place by 2004, with summer populations supplying the wastewater irrigation for coastal areas, and year-round population supplying the treated wastewater for non-coastal areas. In those areas where stream flow is dependent upon effluent discharge, holistic hydrological analyses should be required to protect and or restore the area to optimum conditions.

Beach replenishment in New Jersey costs approximately three million dollars per mile. The same if not more funding should be spent on a sustainable water supply for New Jersey residents. Technical and financial assistance, through the Federal Government, Water Supply Bond Act, the Environmental Infrastructure Trust and other entities; should be appropriated to encompass public and private enterprise, so that wastewater reuse can be accomplished. The local Municipal Utility Authorities do not want to raise the rates for infrastructure, even though reuse is cost effective. Given that the state owns the water, and has not managed it well, the State should assist with the process of making beneficial reuse a reality.

Allocation limits, conservation, capacity-based zoning, required reuse and regulated coordination of the process between the state and local level could be our future water supply plan. State and federal funding should be spent on reusing wastewater to restore our groundwater, base flows and ecosystems. New Jersey can then avoid spending millions of dollars on litigation that results from faulty allocations and damaged and depleted water supply resources.

Sincerely,

Jody Carrara