RESOLUTION OF THE BOARD OF WATER COMMISSIONERS Regarding COMMUNITY WATER FLUORIDATION August 26, 2015

Denver Water began adding fluoride at its Moffat Water Treatment Plant in 1953 at the request and expense of the Denver Board of Health, because water imported through the Moffat Tunnel was considered to be "deficient" in fluoride levels. In 1978, Denver Water assumed the costs of fluoridation, while the City Health Department continued to perform water quality testing and to prescribe the fluoride concentration in reliance on federal recommendations.

In 1980, the Colorado Department of Health provided a grant of \$80,000 to pay for fluoridation equipment and one year's supply of fluoride so that Denver Water could expand fluoride supplementation to its other two treatment plants to assist in "the prevention of dental decay throughout" Denver Water's service area. Denver Water has continued to manage fluoride levels at its treatment plants in cooperation with local and state public health agencies.

Earlier this year, persons opposed to community water fluoridation began to appear at Board meetings, urging the Board to end its practice of managing fluoride concentrations in drinking water. The Board decided to revisit the issue by holding a public forum on July 29 and by encouraging public input from any interested party. Many individuals and organizations have submitted comments and reference documents during this public process.

Denver Water and the public health agencies who have advised us over the years have consistently relied upon the recommendation of the U. S. Public Health Service regarding the appropriate target concentration for fluoride in drinking water. The Public Health Service recommends the optimal fluoride concentration in drinking water that provides the best balance of protection from dental caries while limiting the risk of dental fluorosis.

The Federal Panel on Community Water Fluoridation, an interagency group of experts from the Centers for Disease Control, National Institutes of Health, Food and Drug Administration, Agency for Healthcare Research and Quality, EPA, and U.S. Department of Agriculture, was convened to reexamine the recommended fluoride level established in 1962, a range between 0.7 ppm and 1.2 ppm, depending upon the outdoor air temperature of geographic areas of the United States. The Federal Panel was comprised of physicians, epidemiologists, environmental health experts, dental professionals, toxicologists, statisticians, and economists.

The Public Health Service published a proposed recommendation based on the conclusions of the Federal Panel in January 2011. During the comment period on the proposed rule, the Public Health Service received thousands of comments opposing community water fluoridation, raising the same categories of objections as those submitted to Denver Water at the public forum and during the public comment period. In response, the Federal Panel reviewed anew the underlying best available science, but did not identify compelling new information to alter its assessment that 0.7 ppm provides the best balance of benefit to potential harm.

On May 1, 2015, the Public Health Service issued its final decision document, adopting a recommendation to change to a single target concentration of 0.7 ppm. The decision was influenced by the existence of multiple sources of fluoride exposure today; updated studies on the prevalence of dental fluorosis; evidence that fluid intake among children no longer differs based on temperature zones; and data analysis showing that a fluoride concentration of 0.7 ppm achieved the maximum reduction in dental caries, while increasing protection from fluorosis compared to the previous range of concentrations.

In addition to reviewing the decision of the U. S. Public Health Service and the public comments, the Board has received many letters supporting continuation of community water fluoridation from public and professional organizations. Notably, every public health agency operating in our service area has urged us to continue our practice of managing fluoride concentrations in our drinking water: Denver Public Health Department and Denver Health; Denver Environmental Health; Tri-County Health Department (Adams, Arapahoe, Douglas); Jefferson County Public Health; and the Colorado Department of Public Health and Environment.

Support of medical professionals for community water fluoridation was expressed in letters from the Colorado Dental Association; the American Dental Association; the Colorado Academy of Pediatric Dentistry; the Colorado Medical Society; the Colorado Academy of Family Physicians; and the Deans of the University of Colorado Dental, Medical and Public Health Schools. We have also received letters of support from community organizations dedicated to health, children, and medical care for under-served populations in our service area.

Nothing has been presented to the Board or learned in our research that would justify ignoring the advice of these public health agencies and medical and community organizations, or deviating from the thoroughly researched and documented recommendation of the U. S. Public Health Service.

Although Denver Water's source water is naturally fluoridated, only careful management of fluoride levels in our drinking water can provide the desired dental health benefit. Fluoride levels in our source water vary widely. One tributary may have concentrations much different from the next tributary downstream. Water entering Foothills Treatment Plant over the last three years varied in fluoride concentration from 0.44 to 1.02, below and above the optimal level of 0.7, while water entering the Moffat Treatment Plant ranged from only 0.12 to 0.33, well below 0.7. Due to the skill and attention of our water treatment operators, Denver Water has achieved monthly averages for all our customers very close to the optimal level.

If Denver Water were to cease supplementing with fluoride, our customers would still receive fluoridated drinking water. However, some portions of our service area would receive on average less dental health benefit than others, and fluoridation levels within our system would vary significantly, making the public health benefit for all our customers less predictable and less uniform. Denver Water's active management provides levels of fluoride that are both reliable and transparent. Consumers of our water can be informed about fluoride levels in their water by accessing readily available public information.

Community water fluoridation is a public health action, which by definition protects the health of the population in general, and sometimes conflicts with individual choice. The Board acknowledges and appreciates the sincerely held beliefs of those who oppose fluoridation. However, the Board must rely on those who have both the expertise and the responsibility to protect the health of the public. Community water fluoridation provides health benefits continuously to all our customers, at all stages and ages of their lives, regardless of their access to health care or their adherence to healthy living guidelines. Those who object to fluoridated water do have alternatives, such as non-fluoridated bottled water or in-home filtering systems.

The Denver Water Board and staff have dedicated considerable time and resources to the issue of community water fluoridation. We have provided a fair opportunity to be heard, and have given careful consideration to all the objections raised. We have reached a conclusion to continue community water fluoridation, and now need to devote our resources to other matters requiring our attention. While public input is always available through our website, the Board will no longer dedicate time during Board meetings to hear comments, either in support or in opposition to aspects of community water fluoridation.

Board President August 26, 2015