

**MINUTES OF THE MEETING
OF THE
ASSEMBLY COMMITTEE ON NATURAL RESOURCES,
AGRICULTURE, AND MINING**

**Seventy-Ninth Session
March 7, 2017**

The Committee on Natural Resources, Agriculture, and Mining was called to order by Chair Heidi Swank at 1:34 p.m. on Tuesday, March 7, 2017, in Room 3138 of the Legislative Building, 401 South Carson Street, Carson City, Nevada. The meeting was videoconferenced to Room 4406 of the Grant Sawyer State Office Building, 555 East Washington Avenue, Las Vegas, Nevada. Copies of the minutes, including the Agenda ([Exhibit A](#)), the Attendance Roster ([Exhibit B](#)), and other substantive exhibits, are available and on file in the Research Library of the Legislative Counsel Bureau and on the Nevada Legislature's website at www.leg.state.nv.us/App/NELIS/REL/79th2017.

COMMITTEE MEMBERS PRESENT:

Assemblywoman Heidi Swank, Chair
Assemblywoman Lesley E. Cohen, Vice Chair
Assemblyman Chris Brooks
Assemblywoman Maggie Carlton
Assemblyman John Ellison
Assemblywoman Lisa Krasner
Assemblywoman Robin L. Titus
Assemblyman Justin Watkins
Assemblyman Jim Wheeler
Assemblyman Steve Yeager

COMMITTEE MEMBERS ABSENT:

Assemblywoman Sandra Jauregui (excused)

GUEST LEGISLATORS PRESENT:

Assemblywoman Amber Joiner, Assembly District No. 24

STAFF MEMBERS PRESENT:

Susan E. Scholley, Committee Policy Analyst
Randy Stephenson, Committee Counsel
Nancy Davis, Committee Secretary
Cheryl Williams, Committee Assistant



OTHERS PRESENT:

Michael Hackett, representing Nevada Public Health Association; and Nevada Primary Care Association
Kevin Dick, District Health Officer, Office of the District Health Officer, Washoe County Health District
Lynn Bethel Short, Private Citizen, Reno, Nevada
Robert Talley, DDS, Executive Director, Nevada Dental Association
Charles Duarte, Chief Executive Officer, Community Health Alliance
Catherine O'Mara, Executive Director, Nevada State Medical Association
Michael D. Hillerby, representing Renown Health; and University of Nevada, Reno School of Medicine
Jared Busker, Policy Analyst, Children's Advocacy Alliance
Syd McKenzie, representing Oral Health Nevada
Catherine McCarthy, representing the Nevada Academy of Family Physicians
Michael Johnson, Director, Community Health Division, Southern Nevada Health District
Angel De Fazio, Private Citizen, Las Vegas, Nevada
Michael Pagni, representing Truckee Meadows Water Authority
Mark Foree, General Manager, Truckee Meadows Water Authority
Christopher John Hussar, Private Citizen, Reno, Nevada
Joannah Schumacher, Private Citizen, Reno, Nevada
Stephen W. Driscoll, City Manager, City of Sparks
Juanita Cox, Private Citizen, Reno, Nevada
Katania Taylor, Private Citizen, Reno, Nevada
Sara Yelowitz, Private Citizen, Reno, Nevada
Fred Voltz, Private Citizen, Carson City, Nevada
Jim Jenks, Private Citizen, Washoe Valley, Nevada
Glenn Hausenfluke, Private Citizen, Reno, Nevada
Hans Frischeisen, Private Citizen, Reno, Nevada
Joy Davis, Private Citizen, Reno, Nevada
Thomas Lee, Private Citizen, Reno, Nevada
Laurie Yarborough, Private Citizen, Reno, Nevada
Clint Borchard, Private Citizen, Verdi, Nevada
Wendy Stolyarov, Legislative Director, Libertarian Party of Nevada

Chair Swank:

[Roll was called and standard rules of the Committee were reviewed.] I would like to lay some ground rules for today's hearing. We have a lot of very impassioned folks here today. This will be a very civil hearing. We will have a bill presentation that should last around 15 minutes. We will then hear testimony from those in support of the bill. That will last 40 minutes. Each person will get two minutes to speak. We will then have a 10-minute testimony by the Truckee Meadows Water Authority (TMWA). After that, we will have 40 minutes of opposition; again, each person gets two minutes. We will then move into

neutral. Keep in mind, this is a policy committee, not a money committee. We will be discussing policy only today. I will now open the hearing on Assembly Bill 193.

**Assembly Bill 193: Requires the fluoridation of water in certain circumstances.
(BDR 40-716)**

Assemblywoman Amber Joiner, Assembly District No. 24:

The legislation I bring to you today is specific to Washoe County and my district. I have spoken with many constituents in my district who, frankly, are shocked that this is not already law. That was my motivation to bring this bill to you today. The purpose of Assembly Bill 193 is to provide Washoe County with fluoridated water in the same way that Clark County provides it. It will provide the same health benefits to the residents in Washoe County that Clark County residents have enjoyed since 1999.

I became interested in the benefits of fluoride at a very early age because, back in the '70s, my mom used to give me little pink fluoride pills. Maybe some of you had the same experience. I remember asking her why I had to take them. I distinctly remember her telling me all the health benefits and that it was for my teeth. Looking back, I am really grateful to my mother for her wisdom, and I know it is a main reason that somehow I survived into my twenties without a single cavity.

As a policy analyst working for the Legislative Counsel Bureau about ten years ago, I researched fluoride for legislators. I never knew at the time I would become a legislator, but I was their research policy analyst. I remember thinking, this is really unfair that those of us living in Washoe County are not being treated equally under the law. We did not have fluoridated water in Washoe County. This bill has been on my mind ever since, because I believe that we deserve to have fluoridated water and all of the corresponding health benefits.

Professionally, I went on to work in the health care and public health fields, with various populations. I was again reminded of how important prevention measures like fluoridation are in avoiding costly and painful medical and dental procedures. As you may know, the federal government's Centers for Disease Control and Prevention (CDC) lists fluoridated water as one of the ten great public health achievements of the last century. Studies show that it prevents at least 25 percent of tooth decay in both children and adults. What we find is that this is not just a children's issue. You will hear more today about the benefits across the lifespan. I have included in my handout on the Nevada Electronic Legislative Information System (NELIS) the full CDC statement and a list of organizations that recognize the public health benefits of community water fluoridation; there are more than 100 organizations listed ([Exhibit C](#)).

As a mom, I have tried to be vigilant about providing fluoride supplements to my kids, just as my mom did for me. But let us be honest, even with the best of intentions, that is really difficult. Our insurance only allows a 30-day supply and, I have to admit, there have been

many times where there has been a gap in my being able to get to the pharmacy. I have so often wished we could just have it in our water, as most people in American do.

Also as a mom, I have had some pretty shocking conversations at birthday parties. I remember one distinctly: I was complaining to one mom about how I had to stop by the pharmacy to get fluoride on my way home. I remember her saying, "Oh, I do not worry about that, we get plenty of fluoride in the water." She was shocked when I told her that in Washoe County we do not have any. This conversation has been repeated many times, and many people are surprised and dismayed that our community does not have one of the most basic modern amenities in place. As we grow and market ourselves to businesses and professionals in other states as a destination for economic development and a high quality of life, we need to make sure that we are meeting their expectations. Fluoridated water is an expectation in modern communities of our size.

There is a file on NELIS today with several letters of support that I want to highlight. They include the American Academy of Pediatrics, the American Academy of Pediatric Dentistry, and other testifiers will highlight more ([Exhibit D](#)).

I would now like to walk through the bill; it is very short. I want to clarify that all we are doing is changing the population cap so that Washoe County is treated the same as Clark County; that is the essence of this bill. There is a lot of misinformation out there about what this bill does, and to be clear, we are not creating a new precedent or a new exception in the law. The exception has already existed for Clark County since 1999, when Assembly Bill 284 of the 70th Session passed.

Section 1 of the bill is the population cap change to include Washoe County. We included the language in section 2 because northern Nevada sometimes goes through drought periods. While we are fluoridating the surface waters, sometimes we need to draw from wells that may not be fluoridated. We wanted to provide an exception for during drought, where it would not have to meet the fluoridation levels. This is just being practical and understanding our environment.

I have heard concern from folks that this language may not do what we had hoped it would do as far as excluding some of the wells, and perhaps decrease some of the cost of implementation. If this language does not do that, then I have an open door to talk to Truckee Meadows Water Authority and other organizations that have concerns with this provision. Again, I am trying to figure out a way that we can implement this reasonably.

With that, I would like to turn the presentation over to others I have with me as part of our core presentation.

Michael Hackett, representing Nevada Public Health Association; and Nevada Primary Care Association:

Both Nevada Public Health Association and Nevada Primary Care Association strongly support A.B. 193. The Nevada Public Health Association is an organization whose mission

is to serve as the voice of public health in Nevada in order to improve health and achieve health equity. An overarching policy goal for us is insuring the right to health and the right to health care. Among our priorities in 2017 are the following, which speak directly to and in support of A.B. 193: First, protecting and promoting maternal, child, and adolescence health. Second, advocating for policy measures that address health equity and the social determinants of health. Third, advocating for local, state, and federal investments in public health infrastructure and programs. Community water fluoridation is not just a public health issue, it is a public health responsibility. Fluoridating public water systems in the state's second most populated county removes a social determinant of health that does not exist for most Nevadans. Assembly Bill 193 would improve the state's health equity status and provide a significant investment in public health infrastructure.

During the past interim session, the three local health authorities and the Public Health Association identified water fluoridation as a public health priority. In its strong submission to the Legislative Committee on Health Care requesting legislation, which was also supported by the Nevada Primary Care Association, the following points were made: Community water fluoridation has proven to be a safe, effective, and cost-saving public health measure for preventing tooth decay. As Assemblywoman Joiner mentioned, it has been recognized by the CDC as one of the ten greatest public health achievements in the twentieth century. It is the single most effective public health measure to prevent dental decay.

Community water fluoridation benefits everyone in the community, regardless of age and socioeconomic status, and provides protection against tooth decay in populations with limited access to prevention services. With more than 60 years of research and practical experience, the overwhelming credible scientific evidence has consistently indicated that the fluoridation of water supplies in communities is safe. Community water fluoridation is recommended by nearly all public health, medical, and dental organizations, including the American Dental Association, the American Academy of Pediatrics, the American Public Health Association, the United States Public Health Service, and the World Health Organization.

As I previously mentioned, Nevada Primary Care Association also supports A.B. 193. The Nevada Primary Care Association is the federally designated primary care association in Nevada. It is a federally qualified health center that provides primary, behavioral, and dental care to underserved and Medicaid populations. As such, the Nevada Primary Care Association has, among its members, some of the largest providers of dental care to low-income children in this state. Requiring fluoridation is one of the most cost-effective ways to improve health and quality of life for our health center's patients. With that, I would like to call your attention to a letter that was submitted from Sharon Chamberlain, Chief Executive Officer for Northern Nevada Hopes, which is a federally qualified health center in Washoe County ([Exhibit E](#)). Northern Nevada Hopes provides care for Washoe County residents and families who are low income, homeless, and often suffer from chronic illness. The patients also suffer from poor oral health, including chronic dental pain, difficulty controlling other chronic conditions, and inability to afford preventive measures.

There are three points in the letter that I would like to briefly bring to the Committee's attention. First, fluoridation will help everyone that Northern Nevada Hopes serves as part of their population group. This is particularly beneficial for the clinic's population who cannot afford fluoride drops or dental sealants for their children, who cannot afford preventive dental care for their teeth, and who cannot afford restorative work. Second, fluoride has been shown to reduce mouth acidity that can start and exacerbate tooth decay. Third, fluoridation would impact the entire community in such a positive way that will be particularly helpful to Northern Nevada Hopes' high risk and complicated patients.

Kevin Dick, District Health Officer, Office of the District Health Officer, Washoe County Health District:

The Washoe County District Board of Health supports this bill and the proven public health benefits of community water fluoridation. Community water fluoridation is also supported by St. Mary's Health Network, Northern Nevada Medical Center, and Renown Health. I received a letter from St. Mary's Health Network's Chief Executive Officer, Helen Lidholm, in support of A.B. 193 that I have provided ([Exhibit F](#)).

We know that we are harming our children and others in the community by not providing fluoridation. We believe that residents of Washoe County deserve the same benefits of fluoridation that the residents of southern Nevada have enjoyed for so many years. Fluoridation is not a medical treatment; fluoride is a naturally occurring mineral. Fluoridation of the water supply provides for an adjustment of its concentration to an optimum level for human health.

Over 211 million people in the United States are receiving fluoridated drinking water, and 74 percent of community water systems provide it. The treatment process equipment is readily available and in operation in water treatment systems across the country. I have provided an article from a community that implemented fluoridation that provides a picture of a fluoridation system and discusses the ease of operation and safety systems built into it ([Exhibit G](#)).

Studies have documented the costs and benefits involved in community water fluoridation. They have shown that costs per person are higher for small water systems and much lower for larger water systems. A 2016 study found that, per capita, annualized costs for community water fluoridation ranged from \$0.11 to \$4.92. Even at the high cost levels in communities much smaller than ours, it remains an excellent investment. A recent study just published in December 2016 found that communities across the country that have invested in community water fluoridation enjoyed an annual per capita dental cost savings of \$32.19, an annual return on investment of 20 to 1. For the population of 385,000 served by TMWA, that is a savings of over \$12 million per year.

The fluoride concentration limit for discharge into the Truckee River is 1 part per million (ppm). The optimum level for water fluoridation is 0.7 ppm. This level is safe and can be discharged to the river without further treatment.

The fluoride will not harm plants, animals, or the fish in Pyramid Lake. Naturally occurring concentrations of fluoride of up to 13 ppm are found in Pyramid Lake, and the cui-ui fish and trophy trout have adapted to thrive in that environment. A paper published in the *International Journal of Occupational and Environmental Health* addresses concerns that have been expressed regarding fluoride's effects on plants, animals, humans, and water distribution systems. The paper finds that scientific evidence supports the fluoridation of public water supplies as safe for the environment and beneficial to people.

A number of Surgeons General have commented on the benefits of community water fluoridation. Dr. C. Everett Koop stated, "Fluoridation is the single most important commitment a community can make to the oral health of its children and to future generations." Dr. David Satcher stated, it is "an inexpensive means of improving oral health that benefits all residents of a community, young and old, rich and poor alike."

Community water fluoridation is a health equity issue. Many in Washoe County lack access to medical, dental, and mental health care, and a third of the population lives in a dental health provider shortage area. That is why the District Board of Health has established access to health care as a community health improvement priority.

Our disadvantaged population faces additional challenges in receiving dental care, and poor dental health is disproportionately impacting minority populations. The disadvantaged in our community also suffer from higher rates of heart and lung disease and strokes. By providing community water fluoridation, we provide these groups access to preventive dental care.

Oral health offers protection against microbial infections, and research links oral health status to nutritional deficiencies, heart and lung diseases, stroke, low birth weight, and premature birth. Providing community water fluoridation will alleviate unnecessary pain and suffering and improve the lives of the residents of Washoe County.

Lynn Bethel Short, Private Citizen, Reno, Nevada:

I am the immediate past chair of the executive board of the American Public Health Association, and the former dental director for the Commonwealth of Massachusetts, and most importantly, I am a resident of Reno, Nevada.

Studies demonstrate that poor oral health negatively impacts general health. Tooth decay is the most common chronic disease affecting 58 percent of teenagers and 97 percent of adults; it can lead to malnourishment, anemia, emergency surgery, life-threatening secondary infections, and death. In addition, it affects digestion, speech, social mobility, self-image, self-esteem, and quality of life. Water fluoridation helps to prevent this disease.

Residents at least 21 years of age living in Washoe County have lost more teeth to dental disease than those living in Clark County. Poor oral health is an obstacle to finding employment as well as causing missed school and work hours. For those that do not have regular access to dental care, hospital emergency department visits are the norm. In Nevada,

more than \$12 million was spent on dental-related emergency room visits in 2013, with no long-term treatment provided; and residents continue to experience pain and suffering.

Fluoride is a naturally occurring element found in all water sources, and fluoridation has been thoroughly studied since 1945. It is safe, cost-effective, and equitable. Adjusting the fluoride content of a public water supply is the embodiment of health equity.

In communities that have implemented fluoridation, the return on investment has been huge. Children living in fluoridated communities have 2.25 fewer decayed teeth and lower treatment costs than children living in non-fluoridated communities. Medicaid expenditures by state are also reduced. A 2010 study found that Medicaid enrollees in non-fluoridated counties needed 33 percent more fillings, root canals, and extractions than in those counties where fluoridated water was prevalent. A Texas study confirmed that the state saved \$23 per child, per year in Medicaid expenditures because of the cavities that were prevented by drinking fluoridated water.

Since 1953, when Eisenhower was President, every U.S. Surgeon General has consistently issued statements in support of fluoridated public water systems. The current Surgeon General has said, "Fluoride's effectiveness in preventing tooth decay extends throughout one's life, resulting in fewer and less severe cavities." In fact, each generation born over the past 70 years has enjoyed better dental health than the one before it. That is the very essence of the American promise.

There are more than 70 years of scientific evidence to prove that fluoridation is safe, cost-effective, and improves oral health and general health for members of the community across the lifespan.

Nothing can be truer than the Surgeon General's statement, ". . . we know that so much of our health is determined by zip code rather than genetic code." Do not deprive Washoe County residents of the same health benefits that the residents of Clark County have been receiving for the past sixteen years. [Also provided written testimony ([Exhibit H](#)).]

Robert Talley, DDS, Executive Director, Nevada Dental Association:

The Nevada Dental Association represents over 60 percent of Nevada's practicing dentists. We strongly support A.B. 193.

You have already heard many of the positive effects of water fluoridation by other testimony today. I have the privilege of speaking to some studies that have been done by Dr. Marcia Ditmyer and some of her colleagues at the University of Nevada, Las Vegas School of Dental Medicine ([Exhibit I](#)). I submitted copies of these studies on NELIS and Dr. Ditmyer is with us in Las Vegas at the Grant Sawyer State Office Building to answer any technical questions on her studies.

As you have heard, Clark County has had fluoridated water since March of 2000. Dr. Ditmyer and her group developed and then validated a dental caries risk assessment tool.

The purpose of these studies was to determine the prevalence of untreated and restored lesions and the severity of these using decayed, missing, and filled teeth (DMFT) indices. These studies were carried out among Nevada youth assessed during a statewide, school-based oral health screening initiative, comparing these data with similar National Health and Nutrition Examination Survey data. Conclusions include: Ten variables were found to significantly contribute to the model, with water fluoridation being the strongest factor. Results found that those living in areas without municipal water fluoridation were two times more likely to develop dental caries than those who lived in the areas with municipal water fluoridation.

Dr. Ditmyer's group then did two more studies on "Inequalities of caries experience in Nevada youth expressed by DMFT index vs. Significant Caries Index (SiC) over time" and "A case-control study of determinants for high and low dental caries prevalence in Nevada youth ([Exhibit I](#))." Again, conclusions from these studies include: Looking at the proportion of caries-free youth by county of residence found a significantly greater proportion of caries-free adolescents in Clark County with water fluoridation. This study found that those children living in communities with fluoridated municipal water supplies experience substantially lower mean DMFT scores. This study also confirmed that participants living in areas without community water fluoridation in Nevada were almost two times more likely to present with higher DMFT indices.

Simply, students in areas without community water fluoridation had significantly higher untreated tooth decay and DMFT indices.

As I close, let me summarize some important reasons for community water fluoridation. It is the single most effective public health measure to prevent tooth decay. The CDC has proclaimed community water fluoridation one of the ten great public health achievements of the twentieth century.

It is natural. Fluoride is already present in all water sources, even the oceans. Water fluoridation is simply the adjustment of fluoride that occurs naturally in water to recommended levels for preventing tooth decay.

Water fluoridation is similar to fortifying other foods and beverages. Water that has been fluoridated is similar to fortifying salt with iodine, milk with vitamin D, orange juice with calcium, and bread with folic acid.

Fluoridated water prevents dental disease. It is the most efficient way to prevent one of the most common childhood diseases, dental decay. An estimated 51 million school hours are lost each year due to dental-related illness.

Fluoridation protects all ages against cavities. Studies show that community water fluoridation prevents at least 25 percent of tooth decay in children and adults, even in an era with widespread availability of fluoride from other sources, such as fluoride toothpaste.

Fluoridation is safe and effective. For more than 70 years, the best available scientific evidence consistently indicates that community water fluoridation is safe and effective.

For most cities, every dollar invested in water fluoridation saves \$38 in dental treatment costs.

Our disadvantaged communities with little or no access to comprehensive dental care will greatly benefit from this inexpensive, accessible source of preventive care.

More than 100 national and international organizations recognize the public health benefits of water fluoridation.

Assemblywoman Joiner:

I believe that concludes our initial group. I appreciate you all listening. I would like to point out one other exhibit that is on NELIS. It is called "Community Water Fluoridation: Myths and Facts" ([Exhibit J](#)). In this document, there are a lot of scientific links. We took all the main arguments that you will hear in the opposition side and we provided links to scientific data that proves they are false. I would encourage you to look at it.

Assemblyman Yeager:

On page 3 of the bill, section 2, subsection 5, there is some new language added. What is that language trying to get at?

Assemblywoman Joiner:

There was a similar bill in 2009 [[Senate Bill 311 of the 75th Session](#)] that attempted to have fluoridated water in Washoe County. We used that same language, but I believe the discussion then was, looking at the topography and the reality of how we use water in the North, we are not always able to use surface water. We actually have several wells in our system. During drought years when the river is very low, we tap into those wells more often. This section says there could be an exemption to these levels of fluoride in drought years so that the wells would not necessarily have to be fluoridated. This is being realistic about what might happen. I am happy to work on this section, because I am hearing that it may not do what we had hoped it would do. At one time, I thought we might be exempting a portion of the wells to make the cost more reasonable, but maybe we need to fix that language.

Assemblywoman Cohen:

Is this fluoride basically the same fluoride that is in toothpaste?

Robert Talley:

It is in a different form, but it is the same mineral.

Assemblywoman Cohen:

Is this something that can be removed by a home filtration system, such as a reverse osmosis system?

Robert Talley:

Unfortunately, that is true. Reverse osmosis systems tend to remove most of the fluoride out of the water. As a dentist, I would suggest that my patients drink the regular water.

Assemblywoman Cohen:

Does something more simple, like the Brita water filter, work the same?

Lynn Bethel Short:

Only a reverse osmosis filter will remove the fluoride.

Assemblyman Watkins:

I am wondering whether the impacts or benefits for health affect our youth more than adults. I understand that it is healthful throughout the life, but at a certain age, does the fact that you did not get enough fluoride become irreversible?

Robert Talley:

We believe that fluoride helps all, not just children. It gets in the bones and makes them stronger. It helps people with gum recession. As we get older, our gums tend to recede, exposing the root surfaces of the teeth. Those root surfaces tend to absorb fluoride in the water that helps make them stronger and more resistant to decay. We think it is beneficial throughout your life.

Lynn Bethel Short:

When someone drinks fluoridated water, whether they are an adult or a child, it actually incorporates itself into the saliva. It is continually bathing the teeth; that is a real benefit in regard to not just children where it incorporates itself into the tooth structure while it is developing, but it is in the saliva.

Assemblyman Wheeler:

You did not address that section 1 excludes *Nevada Revised Statutes* (NRS) 445A.025 to 445A.050 which includes NRS 445A.035. That part of the statute says that the people shall be allowed to vote for fluoridation or not fluoridation at the next general election. I am wondering why you are taking away the people's right to vote on this. I know they voted on it once before and it lost.

Assemblywoman Joiner:

That was about 15 years ago. As I mentioned in my testimony, the reason we are doing this is it is exactly how Clark County did it. I understand the concern that people have; I think it is a misrepresentation of what the bill does. I think it is a misunderstanding of what our role is in government and representative democracy, honestly. For those folks who want it to be a ballot question, I ask, why has it not been a ballot question in the last 15 years? That is something that seems like a delay tactic. I think it is my responsibility to act on good science and promote health as a representative of my constituents. If they do not think I am right in that decision, they can vote me out next time. That is the point of representative democracy. I have received enough feedback that I am confident that this is what my constituents put me

here to do, which is to act in the best interest of public health. We did not intentionally drop this bill to remove it from the vote, but this is exactly how it happened in Clark County, and because it has been so successful, we feel passionately that this is also important enough for Washoe County.

Chair Swank:

I believe that is existing language, is that correct?

Assemblywoman Joiner:

This exception language is already in NRS for Clark County; we are just changing the population cap.

Assemblyman Wheeler:

We have already removed Clark County's right to vote and now we are going to remove Washoe County's as well.

Assemblywoman Joiner:

We do not take to a vote things we know are right for health. We do not ask people, Should we put chlorine in the water to keep you healthy? We know there are pathogens in the water and we have to add chlorine. We do not ask people, Should we inspect restaurants? We have laws; we legislate to say, here are the criteria for keeping people healthy, and in my mind, this is in the same category.

Assemblyman Ellison:

When I brushed my teeth today at noon, I read the warning label on my toothpaste ([Exhibit K](#)). On the back is a warning sign. It says keep out of reach of children under 6 years of age. It also says for children 2 to 6, use only a pea-sized amount on the toothbrush. So here is a warning sign on the toothpaste. Are we putting more into the water system that adds to the warnings? Maybe you can explain this.

Robert Talley:

It is all about optimal levels. On a child that young, you do not want them swallowing it, you want them to spit out as much as they can. These things work in unison together to make those teeth strong and make them resistant to decay.

Assemblyman Ellison:

The only thing that I might add, the label also says to contact the poison control center right away.

Chair Swank:

This bill is not talking about taking large quantities of toothpaste and dumping it into our water supply and mixing it up and having small children drink it, is that correct?

Robert Talley:

That is correct.

Assemblywoman Titus:

In section 2, subsection 5, I understand what you are trying to do, withdrawing the need to fluoridate when TMWA is pumping from wells. I am curious if you have any data on the amount of fluoride that most water has in it naturally. Do you know if any of the wells in this system have any natural fluoride in them?

Assemblywoman Joiner:

We did look into that, and I believe that Kevin Dick has some information on that. In Washoe County it is very low, almost zero, if I remember correctly.

Kevin Dick:

I cannot provide you with the concentrations at this time. I do know that previously, TMWA had determined that the concentrations in their well water as well as surface water were well below the optimal fluoridation level of 0.7 ppm.

Assemblywoman Titus:

We have an unusually wet year this year. During the drought years, does the concentration change?

Kevin Dick:

I do not have that information. I think it would be unlikely that the concentration would change much with a drought or not.

Chair Swank:

I will now hear those in support of A.B. 193. I will give those in support 40 minutes.

Charles Duarte, Chief Executive Officer, Community Health Alliance:

Community Health Alliance (CHA) is a nonprofit community health center in Washoe County with six health centers. We provide dental, medical, and behavioral health services as well as nutrition services to over 30,000 residents of Washoe County.

On behalf of our 15 dentists and hygienists, as well as our 20 primary care providers who serve the community, we are in strong support of A.B. 193, primarily because of the reasons you have already heard. It reduces dental caries, one of the most common diseases in children that can be prevented. I will defer the rest of my time to the other members here. [Written testimony was also provided ([Exhibit L](#)).]

Catherine O'Mara, Executive Director, Nevada State Medical Association:

We support this bill because of the positive impact on public health.

Michael D. Hillerby, representing Renown Health; and University of Nevada, Reno School of Medicine:

The Committee will be receiving a letter jointly signed by two of our community physicians: Dr. Max Coppes is a Chair and Nell J. Redfield Professor of Pediatrics at the University of Nevada, Reno School of Medicine and Physician-in-Chief at Renown Children's Hospital

and Trudy Larson, Director of School of Community Health Sciences, University of Nevada, Reno and Professor of Pediatrics, University of Nevada, Reno School of Medicine. Both are in support of the bill ([Exhibit M](#)).

Jared Busker, Policy Analyst, Children's Advocacy Alliance:

We are in support of this bill for the reasons already stated.

Syd McKenzie, representing Oral Health Nevada:

Our vision is to empower all Nevadans to have better oral health. I have been a dental hygienist for 44 years. I have been in private practice, public health, higher education, and I have been in all kinds of extreme situations throughout the state of Nevada. I can repeat all of the facts you have heard, but for 45 years I have tried to fight passion with facts. Those facts just do not seem to come across.

I would like to ask you to come with me to the emergency room and sit with a child who has never had a single day in his life that he has not been in pain because of dental decay. I would like to have you come with me and hold a screaming child all night long with parents who cannot go to work the next day because they have a child who is in pain. This pain could have been prevented with fluoridated water. It needs to be prevented. I suspect that everyone who is in opposition to fluoridation could be considering child abuse. This is abusive to our children. Once you have seen the decay and heard the screams, you cannot unseen it. I apologize for my passion. I do have the same facts that were presented already. There is not a single legitimate scientific magazine article that does not provide sound evidence for fluoridation. [Also provided written testimony ([Exhibit N](#)).]

Catherine McCarthy, representing the Nevada Academy of Family Physicians:

I am a family physician and am currently a faculty member at the University of Nevada, Reno School of Medicine and a faculty member in the Department of Community and Family Medicine. I am also passionate about this topic of oral health. I was enthusiastic to clear my patients' appointments for this afternoon so I could be here. I see patients in the outpatient and inpatient setting. I see lots of children in my practice. On the inpatient setting, we are the doctors who take care of all the newborns who are not previously established. On any one day we might have 15 to 20 newborns, which gives us the great honor of having a very young practice and doing a lot of well-child checks.

We also do a lot of sports physicals, all the normal exams you would expect, but one that you might not expect as much. This is a different kind of physical exam. It is a medical clearance for dental surgery; we call them dental clearances. I pick up a chart and all it will say is dental clearance, just as it might say sports physical. These are preschool children, 3- to 5-year-olds, who are at a very great risk of having to have the surgical procedures under anesthesia. We have to provide a physical examination to say that this child is healthy enough to undergo anesthesia for these procedures. When I pick up these charts, it makes me feel bad; it makes me feel sad; and it makes me mad. I know that, to a large extent, this is a preventable disease, one of the most common childhood diseases. As these children grow into adolescence, the percentage of poor oral health increases into adulthood.

Chair Swank:

Is there anyone else in Carson City who would like to testify in support? I am going to now go to Las Vegas for those in support.

Michael Johnson, Director, Community Health Division, Southern Nevada Health District:

I am here on behalf of the Southern Nevada Health District to support A.B. 193. We echo many of the points that have been expressed. In March 2000, the Southern Nevada Water Authority began adding fluoride to southern Nevada's municipal water supply after the Nevada Legislature passed a bill requiring fluoridation, and a subsequent ballot measure was passed by Clark County residents to continue fluoridation of the water supply.

As has been mentioned, fluoridation has a proven history as a safe and effective public health intervention. We urge you to support A.B. 193. [Also provided prepared testimony, ([Exhibit O](#)).]

Assemblywoman Cohen:

Since fluoride has been added to the water in Clark County, have we seen a rash of children getting ill from the fluoridation?

Michael Johnson:

No, we have not.

Chair Swank:

Is there anyone else in Clark County in support? Before we have TMWA come speak, is there anyone in Clark County who wants to testify in opposition of A.B. 193?

Angel De Fazio, Private Citizen, Las Vegas, Nevada:

If anyone actually read NRS 585.080, it is identical to the Food, Drug, and Cosmetic Act, 21 U.S. Code § 321 – Definitions. The term drug means articles intended for use in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or other animals and; articles other than food intended to affect the structure or function of the body of man or other animals. Fluoride when used in the diagnosis, cure, mitigation, treatment, or prevention of disease in man or animal is a drug that is subject to FDA regulations. Sodium fluoride used for therapeutic effect would be a drug, not a mineral nutrient. Fluoride has not been determined essential to human health. A minimum daily requirement for sodium fluoride has not been established. Source: FDA August 15, 1963.

Fluoride is the only chemical added to water for the purpose of medical treatment. So adding fluoride to water for the sole purpose of preventing tooth decay, a non-waterborne disease, is a form of medical treatment, aka drug.

Fluoridation is unethical. Informed consent is standard practice for all medication. With water fluoridation we are allowing governments to do whole communities, forcing people to take a medicine irrespective of their consent.

Chair Swank:

Is there anyone else in Clark County who would like to testify in opposition? Seeing none, we will now hear Truckee Meadows Water Authority's presentation.

Michael Pagni, representing Truckee Meadows Water Authority:

The Truckee Meadows Water Authority (TMWA) is opposed to A.B. 193. Truckee Meadows Water Authority understands and respects there are strong and opposing opinions on the health aspects of fluoridating the water supply. We take no position on those health issues. Truckee Meadows Water Authority is concerned, however, with depriving citizens of the right to make decisions about their local water supply and the \$70 million fiscal impact A.B. 193 will have on customer rates. Under current law, it is illegal, actually it is a criminal offense, to fluoridate the water supply unless the majority of the people in the affected political subdivision first vote to allow it. This has been the policy of the state for over 50 years, to recognize and respect the right of the people to vote and decide whether they believe the benefits of fluoridation outweigh the costs and risks in their specific community. This requirement applies uniformly throughout the state, with the sole exception of Clark County, as their citizens already exercised their right to vote when they voted to fluoridate their water supply in 2000. This is an important point to clarify.

Under prior testimony there was a comment that this bill is exactly how Clark County got it. With all due respect to the speaker, that is not accurate. Clark County voted. In fact, all of the carve-outs you see in current law were expressly conditioned upon the people of Clark County voting for fluoridation. Had they not voted for fluoridation, those exceptions would not exist.

The citizens of Washoe County also voted on fluoridation in 2002, but unlike Clark County, Washoe County citizens voted against fluoridation by a vote of 58 percent to 42 percent. To date that decision has been respected, including in 2009 when the Legislature considered, but ultimately rejected, a proposal similar to A.B. 193. The Truckee Meadows Water Authority Board is concerned that A.B. 193 would not only override this prior vote of the Washoe County citizens, it would single out TMWA customers as the only persons in the state who are deprived of the right to vote on their water supply by mandating that their water supply be fluoridated without seeking any of their input.

Truckee Meadows Water Authority takes no position on whether fluoride is good or bad; they simply believe their customers should have the same rights as everyone else in the state to make that decision for themselves.

Truckee Meadows Water Authority has an extensive distribution network that utilizes multiple sources of supply. To comply with the minimum concentration levels required under current law and regulation, all 81 of those production facilities would require fluoridation. At this point I am going to need some clarification from the Chair because I noted that the district health testified about specific dollar amounts—purported savings that would be enjoyed by TMWA customers. I want to be respectful to your earlier request, and

I am wondering whether I may provide testimony corresponding to that on the costs that will be borne by TMWA customers. [Also provided written testimony ([Exhibit P](#)).]

Chair Swank:

I would like to avoid the fiscal conversation. I think you have already mentioned the costs, and I think that is similar to the remarks that were made in the first presentation on how much the savings would be.

Michael Pagni:

The fiscal impact is an important concern to the Board, and I hope we have an opportunity to testify on that at some point in the future. There was a question about section 2, subsection 5 from Assemblyman Yeager. Unfortunately, the way that language came out in the bill, it provides no benefits to TMWA because of the way we operate our system. As I indicated, the TMWA Board had two primary areas of concern. The fiscal one will have to be left for another day.

Truckee Meadows Water Authority does understand and respect there are strong opinions on the public health issues, but nothing prevents either side from advocating those to the public and putting this on the ballot at any time. That is the process required by law; that is the process this Legislature saw fit to adopt 50 years ago; that is the process the TMWA Board believes is fair and appropriate and should remain in place.

Assemblyman Watkins:

One of my concerns, being from Clark County, is the part of the argument that pertains to the locality, or the county, that should make a determination of what happens to itself and not Carson City. There are 232 instances in the NRS in which a section or a subsection pertains only to Clark County, and it is governed by Carson City. We did not get the opportunity to make those votes or make those choices, other than through our elected representatives. Why should this be any different than any of those other policy considerations that were made throughout the NRS?

Michael Pagni:

That is what this bill does. It singles out Washoe County from the rest of the state. As you are aware, Clark County had the opportunity to vote. They were given that right, and they exercised it. One of the primary concerns of the TMWA Board is exactly as you mentioned. We are being singled out, treated differently than everyone else in the state, and not given the same rights as other people.

Assemblyman Watkins:

That is not the point of my question. Oftentimes, policy in Carson City dictates what happens in Clark County and Clark County only—in fact, 232 times as currently written in statute—and the only voice that we have is through our representatives in this body. Why is fluoridation of water a more important policy decision than all the other policy decisions that are made in that regard?

Michael Pagni:

I cannot speak to the carve-outs in statute and special legislation and other areas. I would probably share your concerns about the constitutionality of those in a general sense. Today, we are here to speak about this particular bill, and 50 years ago the Legislature believed it in the best interest of the state that these decisions be left to each local community on a community-by-community basis to be made at the ballot box by the voters. All we are asking today is that decision be upheld and that TMWA specifically be able to enjoy those same rights that everyone else in the state enjoys.

Assemblyman Brooks:

In the treatment of TMWA's water, in their water system, are there any chemicals that are added to the water?

Mark Foree, General Manager, Truckee Meadows Water Authority:

Yes, there are other chemicals added for the treatment process. Those chemicals are added to meet Environmental Protection Agency (EPA) drinking water standards.

Assemblyman Brooks:

What is an example of some of those chemicals?

Mark Foree:

Chlorine would be an example; there are various chemicals that help settle the water. There are chemicals; for example, polyaluminum chloride, which is a chemical that helps coagulate the debris in the water and settle it out. There are other filter aids as well.

Assemblyman Brooks:

So, chlorine is a public health issue, correct? It is to keep bacteria and microbes from flourishing in the water so it does not get us sick.

Mark Foree:

That is correct. All of those things I mentioned are required to meet EPA drinking water standards.

Assemblyman Brooks:

Was a vote of the people required to approve the use of those chemicals?

Mark Foree:

I do not believe so; EPA sets those standards, and there are only certain ways to meet those standards.

Assemblyman Brooks:

Chlorine will kill you if you drink it, right?

Mark Foree:

If you drink enough, I am sure that would be the case.

Assemblyman Brooks:

It is probably more dangerous than toothpaste.

Assemblyman Ellison:

The Clean Water Act was implemented across the United States. That was not just implemented in Washoe County or Clark County; that is something the United States federal government implemented across the United States, correct?

Mark Foree:

That is correct. Those are EPA drinking water standards. They are nationwide standards. When I talked about adding chemicals, as a water treatment professional, I want to add the least amount of chemicals I possibly can to meet EPA drinking water standards.

Assemblywoman Carlton:

I am familiar with this debate; it is all déjà vu to me. The emails and phone calls are not new on this particular issue. I have heard it said many times that they want to do this the way southern Nevada did it. As a snapshot in history, Assembly Bill 284 of the 70th Session passed in 1999. A second bill was proposed to send it to a vote of the people. Is that what you are proposing, that this bill should pass and send it to a vote of the people?

Michael Pagni:

Truckee Meadows Water Authority's position is opposing the bill as written.

Assemblywoman Carlton:

I heard you say distinctly, many times, you want to do this the way Clark County did it.

Michael Pagni:

I believe that testimony was from supporters. Our position is that we should have the same rights under existing law as every other county.

Assemblywoman Carlton:

That is how we did it. Do you want to do it the same way, or not?

Michael Pagni:

No. In 2009, that same question was raised and the TMWA said no; the reason being, the ballot question that was put before the people of Clark County was written in such a way that a yes vote meant no and a no vote meant yes.

Assemblywoman Carlton:

So now you are going to question whether my constituents knew what they were voting for.

Michael Pagni:

No, the TMWA Board's position was that if there is a vote that goes to the Washoe County voters, they would like the question written in a different manner than what was proposed in 2009.

Assemblywoman Carlton:

I think if it is good for the goose, it is good for the gander. If we did it one way, we should keep doing it the same way. We cannot parse, pick, and choose how we would like to apply the statute.

Chair Swank:

Are there any other questions from the Committee? [There were none.] We will now move to opposition. Each person has two minutes.

Christopher John Hussar, Private Citizen, Reno, Nevada:

I am a physician and a dentist. I have dealt with chronic disease for over 30 years. I would like to clear up some points. We can argue about statistics all day long. There is no safe level of fluoride in the body. As far as I know with my research, no European communities fluoridate their water, and I do not think you will find any fluoridated cities in Japan or China. China has done studies showing fluoridation of the water lowers IQ. I do not think our nation needs any lowering of IQ.

Fluoride works only topically. The CDC recognizes that it works in the form of a toothpaste. It does not work systemically. Once fluoride is tied up into the body, it bonds irreversibly with calcium. Those women who are getting older, they have to worry about osteopenia and osteoporosis. That is, in part, due to fluoridation. There is an irreversible bond that makes the bone weaker, not stronger. If you see a child with white speckling on his teeth, he already has skeletal fluorosis, which is a systemic problem at this stage of the game, when you see it on the teeth.

Now we are finding out that statistically, those cities that have had fluoride for a long time have higher incidences of decay. Let us consider, if you have skeletal fluorosis, where are you headed as far as arthritis, osteoporosis, and even cancer? There is some literature in my studies, which goes back years, that indicates those towns and cities and communities that fluoridated their water have a higher incidence of osteosarcoma, which is cancer of the bone. If 1 ppm is a safe level of fluoride, and the literature says that 0.2 ppm is safe, as we approach 0.8 ppm, we increase the rate of decay. How do you monitor total ppm of fluoride? We have natural wells in Reno that have fluoride in them.

Chair Swank:

You brought up Japan and China. In my former life I was an anthropologist who specialized in Asia. I lived much of my adult life doing research in Tibet and in India, in places that did not have fluoride. As an adult, after I lived there for eight months doing field work, I came home and spent two hours in the dentist's chair having my teeth drilled due to cavities. The children around me who grew up in those towns had similar problems across all age ranges. I have seen many folks with some very difficult dental problems in places that you mentioned that do not have fluoride.

Christopher John Hussar:

I have seen just the opposite by working in downtown Detroit.

Joannah Schumacher, Private Citizen, Reno, Nevada:

I represent a large bipartisan group of men and women. We are concerned about this issue, especially dealing with the medical issues that Dr. Hussar spoke about. We are also concerned about the financial issues; however you have indicated you do not want to talk about those in this Committee. We would like to know how the state is planning on handling lawsuits that will follow this forced medication of the public. Are you getting insurance? Are you setting up bonds? When the infants and children have problems such as a reduced IQ, according to a new Harvard study, because they get too much fluoride, who will pay for this? How do you quantify a reduction in IQ? What about people's animals who have abnormal bone growth due to overfluoridation? What about people's expensive and exotic fish that will be killed? Water fluoridation adversely harms the poor who are not able to put filters in their homes. How many poor people use water to make formula for their infants? How are you going to put a warning label on the water? How are you going to determine how much water is enough water? How much fluoridation is enough fluoridation? I would like to ask some pointed questions. Is there any known human condition of being fluoride deficient? Has the U.S. Food and Drug Administration ever approved any fluoride products designed for ingestion as safe and effective? Are people's human and constitutional rights being violated if they do not want to participate in drinking sodium fluoride?

Stephen W. Driscoll, City Manager, City of Sparks, Nevada:

Per the City of Sparks legislative platform policies, the city opposes any bill with any unfunded mandates to the city's operations. Secondly, the City of Sparks Council has not taken up the policy discussion related to the medical issue for fluoridation. Lastly, the City, as the operator of the Truckee Meadows Water Reclamation Facility, is trying to match up Division of Environmental Protection regulations with the scientific operations for the plant. Those are operationally different between Clark County and Washoe County. Once matched, scientific and regulatory, the cost to operate will be determined and a fiscal note will be prepared and submitted at that time.

Juanita Cox, Private Citizen, Reno, Nevada:

I am representing Citizens in Action. I will not talk about your unfunded mandates, but I will talk about my personal standpoint. I have dental fluorosis, which is mottling of my teeth, which I got by drinking naturally fluoridated water from a well in the Moana Lane area in Reno, Nevada. I have brittle bones and teeth because of my early childhood and have skeletal problems in my senior days. We have talked about being in pain and suffering; people in my situation have pain and suffering as well, due to taking fluoride in our younger years. I have to watch everything I eat. I have to watch everything I drink. I have to know where there are fluoridated cities so I know where bottled water is coming from. I have to be such a label reader, you cannot believe. If I have more fluoride, I have real problems and my kidneys will take a hit. I could probably have failing kidneys and die from it. This is a concern to anyone who has a compromised immune system. I can even absorb it through showering or bathing. I have to really be careful. [Written testimony was also provided ([Exhibit Q](#)).]

Katania Taylor, Private Citizen, Reno, Nevada:

I am a doctor of oriental medicine and an acupuncturist. I want to start with addressing the discussion we have been having about where the fluoride is coming from. No, it is not coming out of the toothpaste. The main chemicals of fluoridated drinking water are salicylic fluorides; they are not pharmaceutical-grade fluoride products. They are unprocessed industrial byproducts of the phosphate fertilizer industry. It is not the same thing that is going into toothpaste.

Also, to answer the question about China and India, there are studies showing fluorosis in China and India from natural occurring fluoride in the waters that is causing osteoporosis and bone breakage in these countries. They are having to remove fluoride from the water.

Someone mentioned earlier that all the Surgeons General have supported it. In 1983, a public health services panel of world-class experts reviewed the safety data on fluoride and drinking water and were surprised to discover that much of the vaunted evidence was not there. The panel recommended caution, especially in regard to fluoride exposure for children. However, when Surgeon General C. Everett Koop's office released the official report a month later, the panel's most important conclusions and recommendations were deleted.

I also want to answer the question about topical use. There are plenty of studies, including the CDC's, which state that fluoride is beneficial to cavities only in topical use. According to the CDC study in 1999 as well as 2001, fluoride prevents dental caries predominately after eruption of the tooth into the mouth and its actions primarily are topical in both children and adults. This means it does not require you to ingest fluoride and it does need to be integrated into the matrix of the tooth. [Also provided written testimony ([Exhibit R](#)).]

Sara Yelowitz, Private Citizen, Reno, Nevada:

I am asking the Committee to please vote no on A.B. 193. While I am sure that this bill was introduced with good intentions, it is important to realize that there are many, many people here in Reno who do not want fluoride added to their drinking water.

Children all over the United States are being overexposed to fluoride. In 2010, the CDC reported that by the time they are teenagers, 41 percent of American adolescents have dental fluorosis, which is a discoloration of the teeth that is caused by excessive fluoride ingestion during childhood.

As other people have stated, ingesting fluoride causes significant neurotoxic effects, contributes to other health problems, and has been associated with reduced IQ in children.

Out of all age groups, infants are the most vulnerable to fluoride toxicity due to their small size. Because of their size, they can absorb up to 400 percent more fluoride than adults. A number of dental researchers, and even some profluoride dental organizations, now recommend that babies do not receive fluoridated water during their first year of life.

I think the heart of this really comes down to an ethical issue, considering there are so many people who do not want fluoride added to the water. There are some who like fluoride and they are free to use it in topical products. I think it would be wrong to be forced to pay for this with our tax money. On top of that, many of us would then need to buy expensive water filters to remove the fluoride that we did not want in the first place. Please do not use our water supply as a method of mass medicating the entire population. [Also provided written testimony ([Exhibit S](#)).]

Fred Voltz, Private Citizen, Carson City, Nevada:

I am speaking for the National Toxic Encephalopathy Foundation. The Foundation remains adamantly opposed to fluoridation. I would like to make three additional points that have not been made. First, infants who consume formula made with fluoridated tap water may consume up to 1,200 micrograms of fluoride, or about 100 times more than the recommended amounts. With fluoridation, we are adding to the water a prescription-strength drug that has never been approved by the FDA.

Second, fluoride is added to drinking water to prevent a disease, tooth decay, and as such becomes a medicine by FDA definition. While proponents claim this is no different than adding vitamin D to milk, fluoride is not an essential nutrient.

Finally, if this is so great for everyone in Clark County and Washoe County, why is it not being proposed for the whole state? Why are there still approximately 300,000 people who will not be impacted by this? [Also provided written testimony ([Exhibit T](#)).]

Jim Jenks, Private Citizen, Washoe Valley, Nevada:

There are different kinds of fluoride that can be used in the fluoridation of water. The first one is sodium fluoride. Sodium fluoride is also used in the manufacturing of chemical and biological weapons. Sodium aluminum fluoride is commonly used for aluminum smelting, also pesticides applied directly to crops. The CDC says that 95 percent of our water is fluoridated with fluorosilicic acid. This toxic liquid byproduct is acquired by scrubbing chimney stacks of phosphate fertilizer manufacturers. Other names for it are silicofluoride acid. I am against A.B. 193. It is a difficult subject. The best source, according to my dentist, is toothpaste, which can be given to just children who need it, not all of us. It is my understanding that when we are over 35 to 40 years of age, fluoride in the water will make our bones more brittle.

Glenn Hausenfluke, Private Citizen, Reno, Nevada:

Madam Chair, I do not know when you were last in India, but it turns out that my board was in contact with the health minister just last week, and they are redoing their entire everything regarding water. They are taking fluoride out, changing their crops, and going to a completely different source of water altogether.

Common sense, common sense, common sense. Having this put to a vote is the only fair way that this can actually go forward. I have been an alternative medicine doctor for 40 years. I have cured cancer, I have cured heart disease, I have cured everything out there

that you can think of and yet I am constantly scolded and told that what I do is not real and does not really work. I would want to tell everyone on this Committee that if you keep ignoring things that have been around and are common sense for a long time, you are probably going to be the ones who end up suffering the most from this.

Hans Frischeisen, Private Citizen, Reno, Nevada:

My credentials are that I have not been sick since 1972. I think avoiding toxic material, including fluoride, is one of the key components of that. As my accent will tell you, I am from Germany, and you have already heard that Europe is almost free of fluoridation, to the extent of 97 percent. The interesting thing is the level of tooth decay is about the same as in this country, without fluoridation. Are they any smarter there than we are? I heard some discussion here about safety. How come one-third of our young people are suffering from fluorosis? That is the overmedication of fluoride.

Before Germany was reunited, East Germany had been forced to have fluoridation by the communist government. When they reunited, this was immediately done away with. Are the scientists and doctors in Germany not smart enough to know better? We cannot blame dentists for not being familiar with the toxicology of fluoride because they cannot go beyond the mouth; they are not licensed to do that. This is not their field of expertise, but this where the problems really become more serious. You heard mention that it relates to cancer, arthritis, and various other problems.

Joy Davis, Private Citizen, Reno, Nevada:

I am a business owner in Sparks and a concerned citizen. I am opposed to A.B. 193 as this bill circumvents the people to implement a law that has a direct effect on their health and their pocketbook. That is a concern for me; money does matter, and this bill contains an unfunded mandate. I am also opposed to the water system being used as a mass medical delivery system. That is not okay with me. That is not okay for many reasons, which I do not have time to discuss today. We do not use other medications; for example, blood pressure medicine, to medicate the masses. There are reasons for that; we are all different. For example, I cannot have folic acid or vitamin B12 the way that it is put in bread, grain, and cereals. It is contraindicated to me. I do not have the enzymes to break it down. It has negative side effects. It might be okay for the masses, but it is not okay for me. I count in this country, just like the money that I make counts.

There is a cumulative effect of substances that we need to watch out for. Four eight-ounce glasses of fluoridated water would equate to the warning you get on the back of your toothpaste if swallowed. The FDA created this labelling to protect us so that we would not ingest a toxic substance, like fluoride, to that level. That is why I do not believe that we need to mandate these things in our water systems because we do not have control over how much people drink. [Also provided written testimony ([Exhibit U](#)).]

Thomas Lee, Private Citizen, Reno, Nevada:

I am a naturopathic physician, and graduated 31 years ago. I have been licensed in Washington, Arizona, and in this state. I am licensed as an advanced practitioner of homeopathy, as this state does not recognize my profession as a medical art. First I would like to commend the scientists and physicians in Nevada and Arizona who are attempting to mitigate oral hygiene problems with fluoride. It is certainly understandable and agreeable to me that a medicine or a mineral would be used to improve people's health.

I would like to point out that children are more than a bunch of teeth and a bunch of bones. Halogens are a class of chemicals highly reactive and used for environmental purposes throughout the environment. They include such things as fluorine, chlorine, bromine, and iodine. Iodine is very important and necessary for your health, the others are easily much less so, and often toxic in the combinations they are used. We are not evaluating in the science of children's teeth and bones the structural and physical effects in the nervous system and in the endocrine system of fluoridated compounds. If anyone would care to get into the science, chemistry, and biology of fluorine and halogens in the endocrinology of the system, I have some great textbooks you can take your time with. It is really tough, even for people who are in it as a profession.

Laurie Yarborough, Private Citizen, Reno, Nevada:

I have been here before, and I am sorry to have to be back here again, because the information is out there. I did submit pictures of the very sad conditions of children's teeth ([Exhibit V](#)). This is baby bottle tooth decay. Baby bottle tooth decay will not be changed one bit by any amount of fluoride. Someone mentioned 13 ppm of naturally occurring fluoride in Pyramid Lake. The increase in solubility increases the toxicity. We do not even have safety data sheets of what we will be taking into our bodies. However, if you want to know how powerful fluoride is, you have to ask yourself why is it in Prozac? Why is it in Cipro? Why do we have fluoride in some of the most powerful drugs? Because it is a toxic enhancer.

Due to a 1950 federal mandate, all Indian reservations must be fluoridated. If fluoridation works so well, then why do the Native American children have 265 percent more tooth decay? I will tell you why; it is because of poor diet, lack of health education, and lack of access to dental care. The new approach from the United States Public Health Service, Indian Health Service and dental health organizations, including the American Dental Association, is to improve dental health amongst this population by making plans and goals to do exactly what should have been done all along, and what should be happening for other high risk groups: aggressively deal with healthy choices; lifestyle issues; health education on how oral health is essential to overall health; and availability and accessibility of infant and perinatal oral health care programs, free clinics and mobile clinics for those without insurance or for those with Medicaid who cannot find a dentist to serve them.

Clint Borchard, Private Citizen, Verdi, Nevada:

I am a business and property owner. There has been an immense amount of testimony saying that there is no doubt that fluoride is good for oral health; I think that has been substantiated.

We have heard over 70 years of accounts of testing that has said it is good for oral health. Let us just assume that is the case. But, what does it do to the rest of the body? That is where testing has increased significantly in just the last five to ten years: what the long-term effects are. No doubt, it is good for oral health, but 50 of the last 57 credible studies have come to the conclusion that fluoride lowers IQ. The latest study was done by Harvard University.

Let us take a brief look at what this Harvard University study did. In a meta-analysis, researchers from Harvard T. H. Chan School of Public Health and China Medical University took 27 of the latest studies and found strong indication that fluoride adversely effects cognitive development in children. Based on these findings, the authors say that this risk should not be ignored.

I am not saying it is not beneficial for oral health, but you are comparing oral health with mental health, the mental health of our children. If you ask me, I would rather my kid have a cavity than a lower IQ and a lower chance to succeed.

If we are looking at these numbers as a business owner, the reason why major corporations are not moving here is because of the workforce. By approving this bill and lowering our children's IQ, you are going to be detrimentally impacting Nevada's future fiscal advantages and tax revenue. Assemblywoman Joiner wants to say it is a "no-brainer" that we are going to save \$12 million; this is mental health versus oral health.

Chair Swank:

Is there anyone else who wishes to speak in opposition to A.B. 193? Seeing no one, is there anyone who would like to testify in neutral?

Wendy Stolyarov, Legislative Director, Libertarian Party of Nevada:

While the Libertarian Party strongly supports the fluoridation of water systems and repudiates the science denial that frequently haunts the issue, we do not believe that imposing the fluoridation requirement by statute is an ideal solution. We would prefer if the Truckee Meadows Water Authority's ratepayers voted on fluoridation themselves, as a matter of self-government, and we would strongly encourage them to vote in favor of fluoridation.

Essentially, the Libertarian Party of Nevada's position is that we strongly favor water fluoridation, but cannot directly endorse a measure that creates an unfunded mandate, forcing citizens to pay for something they did not vote for locally. The Libertarian Party is therefore neutral on A.B. 193.

Chair Swank:

Assemblywoman Joiner do you have some closing remarks?

Assemblywoman Joiner:

I appreciate Assemblywoman Carlton's comments because I have with me some legislative history. I have to assume that our friends at TMWA do not have benefit of this document.

There is some misleading information in their newsletter and in their testimony. They said Clark County voted to have fluoridation. That is absolutely factually inaccurate. What in fact happened was Assembly Bill 284 of the 70th Session created fluoridation in Clark County. There was a second bill to ask for a ballot question to affirm that. What happened was fluoridated water was flowing in Clark County in the spring of 2000 and then it went to a ballot. The question was, Should the water authority in each public water system in this county that serves the population of 100,000 or more cease the fluoridation of water. The voters of Clark County decided to keep the fluoridation. They could already see the benefits and saw no reason to stop it. That is very important for the legislative record.

I have two other quick things I would like to point out. I will stay away from the fiscal issue; however, TMWA did mention they thought there was a \$70 million cost to this. I would like to say, I started out in November in good faith before this was drafted, in a meeting with TMWA staff and their consultants. I handed them the draft. I asked them, Does the exemption on the wells work? Are there any concerns that you have? I really want this to be a feasible policy. So when they came out with that very large fiscal note, we immediately had people all over the country looking at it. I do believe we will have more realistic estimates for the money committee when we get there. This is a cost issue that can be compromised on as far as once we clarify the language about the wells, I really believe that cost will come down. I would like to continue working with TMWA on that.

The final thing I would like to say is, as was pointed out earlier, we have a "Myths and Facts" sheet ([Exhibit J](#)). Several of them were brought up in the opposition. For example, there is no valid peer-reviewed scientific evidence of any adverse effects to infants. That is in our fact sheet. Additionally, about fluoride being a byproduct of some sort: myth number 7 talks about all the stringent requirements needed for the fluoride to be put in the water system. I just want to emphasize that. Finally, when you have fluoridated water, it is with the strictest requirements. In Clark County and other places where there is fluoridated water, it is constantly monitored. You have a guarantee of what the levels are. Many of the stories that you heard about fluorosis are from naturally occurring fluoride where you cannot control the levels. I would ask you to look at Clark County. Have they had any of these adverse effects? Have they had any of these awful things happen? All I have seen is positive things happen for Clark County, and I really want that for the residents of Washoe County.

Chair Swank:

I have also done some research, looking into how Clark County got fluoridated water. Just to reiterate for the Committee, the Legislature passed A.B. 284 of the 70th Session. It required the Southern Nevada Water System to begin adding fluoride to the municipal water supply. The law required the water supply be fluoridated starting March 1, 2000. In November 2000, there was a ballot question. We are still looking into why there was a ballot question since there was already a bill. The residents of Clark County then rejected the ballot question that would have ceased the fluoridation of the municipal water supply. This was put in place by a bill, not by a popular vote. With that, I will close the hearing on A.B. 193, and I will move into public comment.

Michael Pagni, representing the Truckee Meadows Water Authority:

You stated you were still looking into what happened in 1999. I will refer the Committee to Assembly Bill 689 of the 70th Session: it was a requirement of Governor Guinn that there be a vote of the people of Clark County as a condition of approving A. B. Bill 284 of the 70th Session. This was a separate tag-along bill that came out of that Legislature requiring the vote of the people or the provisions of A.B. 284 of the 70th Session would have sunsetted and expired by limitation.

Juanita Cox, Private Citizen, Reno, Nevada:

I want to say that I am one of the people who was able to get the warning on your toothpaste because it completely affects people's lives. They need to know that they can ingest fluoride through their mouth as a homeopathic remedy.

Joannah Schumacher, Private Citizen, Reno, Nevada:

I want to reiterate, because there seems to be confusion. There is a very recent study from Harvard that talks about the IQ reduction, specifically in small children. I am happy to send the study to the Committee. I think it is important that we have true and accurate facts presented.

Laurie Yarborough, Private Citizen, Reno, Nevada:

I made a list of questions that I think are very important because we do not know what we are getting now. We have lowered the fluoride limit from 1 ppm down to 0.7 ppm. Do you know why that is? It is because fluorosis was starting to grow and grow. That 41 percent of adolescents with fluorosis is not accurate anymore. Now it is 58 percent. This actually includes fluoridated and nonfluoridated areas. They have already talked about what fluorosis is, it is not merely cosmetic, and frankly it is going to cost a lot more if someone does not want that on their teeth after they have it. Since fluoridation was put in place in Clark County, do they have anyone who is monitoring all the sources? The reason there is fluorosis in nonfluoridated areas is because you are getting it in your cereal, and you are getting it in your cola, even though our kids should not be drinking that. There are populations and cultures that do put lots of sugary drinks in sippy cups, et cetera. We are looking at a lot of very intense education efforts to go into healing this problem from what is causing it to begin with. Do we want to get more stupid about it or do we want to get smarter and raise the entire education level of everyone?

Nonetheless, other questions are, who is going to calculate all of our sources from food, water, other beverages, dental products, or prescription drugs? Will our dentist or doctor tell us only to drink four eight-ounce glasses of water? I drink 32 ounces after I work out. I do marathons and triathlons. I drink a tremendous amount of water and I do not want it dumping into my bones. Since the socioeconomic population that is to benefit the most from fluoridation is also a population that does not have the financial means or insurance to see a doctor or dentist, who will inform them of possible overdosing effects of fluoride? Who will pay for the cost of fixing their fluorosis teeth so that they can freely and proudly smile? This issue should truly begin with an allowance for a citizen's advisory committee, and I highly recommend that, made up of rational pragmatic professionals from both sides of the issue.

Katania Taylor, Private Citizen, Reno, Nevada:

I want to point out how everyone is mentioning the wonderful outcomes of having fluoride in the water. There is no official tracking system of the health outcomes of fluoride on health other than cavities. They are not tracking in any way, shape, or form how this is affecting health. Our kids are sicker than ever. Neurodegenerative diseases, hypothyroidism and thyroid disorders are on the rise; autism is skyrocketing. How do we know one of the causes is not fluoride in the water? We do not know, because we are not tracking it.

Chair Swank:

I think I may need a little assistance from our legal counsel. I feel like we are rehashing the hearing.

Randy Stephenson, Committee Counsel:

Largely, there does not have to be a public comment period. The length of the testimony, who testifies, and the length of the meeting is up to the Chair. The Chair has a great amount of discretion in conducting the proceedings of the Committee meetings.

Chair Swank:

I think at this point we are going to adjourn. We gave both sides, those in favor and those in opposition, each 40 minutes. With that, this meeting is adjourned [at 3:23 p.m.].

RESPECTFULLY SUBMITTED:

Nancy Davis
Committee Secretary

APPROVED BY:

Assemblywoman Heidi Swank, Chair

DATE: _____

EXHIBITS

[Exhibit A](#) is the Agenda.

[Exhibit B](#) is the Attendance Roster.

[Exhibit C](#) is a report from the Centers for Disease Control dated April 2, 2015, titled "Statement on the Evidence Supporting the Safety and Effectiveness of Community Water Fluoridation." The report was provided by Assemblywoman Amber Joiner, Assembly District No. 24.

[Exhibit D](#) is a packet of reports and letters of support for [Assembly Bill 193](#) provided by Assemblywoman Joiner, Assembly District No. 24.

[Exhibit E](#) is a letter of support for [Assembly Bill 193](#) from Northern Nevada Hopes, dated March 6, 2017, written by Sharon Chamberlain, Chief Executive Officer, presented by Michael Hackett, representing Nevada Public Health Association; and Nevada Primary Care Association.

[Exhibit F](#) is a letter of support for [Assembly Bill 193](#), dated March 7, 2017, from Helen Lidholm, Chief Executive Officer, St. Mary's Health Network, presented by Kevin Dick, District Health Officer, Office of the District Health Officer, Washoe County Health District.

[Exhibit G](#) is a copy of an article dated December 2016, from *Health Affairs* titled "Costs and Savings Associated with Community Water Fluoridation in the United States" written by Joan O'Connell, Jennifer Rockell, Judith Ouellet, Scott L. Tomar, and William Maas, available at content.healthaffairs.org/content/35/12/2224; an article dated September 2004, from *Centers for Disease Control and Prevention* titled "Water Fluoridation and the Environment: Current Perspective in the United States" written by Howard F. Pollick, available at <https://www.cdc.gov/fluoridation/pdf/pollick.pdf>; and an article dated October 2000, from *Cumberland Times* titled "Fluoride flows in two Garrett towns" written by Alison Bunting, available at <http://www.waterfluoridationcenter.org/papers/2000/cumberlandtimesnews103000.htm>, that were submitted by Kevin Dick, District Health Officer, Office of the District Health Officer, Washoe County Health District.

[Exhibit H](#) is written testimony in support of [Assembly Bill 193](#) presented by Lynn Bethel Short, Private Citizen, Reno, Nevada.

[Exhibit I](#) is a group of four research articles concerning dental caries presented by Robert Talley, DDS, Executive Director, Nevada Dental Association.

[Exhibit J](#) is a report titled "Community Water Fluoridation: Myths and Facts," presented by Assemblywoman Amber Joiner, Assembly District No. 24.

[Exhibit K](#) is a tube of toothpaste provided by Assemblyman John C. Ellison, Assembly District No. 33.

[Exhibit L](#) is written testimony in support of [Assembly Bill 193](#), dated March 7, 2017, presented by Charles Duarte, Chief Executive Officer, Community Health Alliance.

[Exhibit M](#) is a letter of support for [Assembly Bill 193](#), dated March 7, 2017, from Max J. Coppes, MD, PhD, MBA, Chair & Nell J. Redfield Professor of Pediatrics, University of Nevada, Reno Med, Physician-in-Chief, Renown Children's Hospital, and Trudy Larson, MD, Director of School of Community Health Sciences, University of Nevada, Reno, Professor of Pediatrics, University of Nevada Med, presented by Michael D. Hillerby, representing Renown Health and University of Nevada, Reno School of Medicine.

[Exhibit N](#) is written testimony in support of [Assembly Bill 193](#) presented by Syd McKenzie, representing Oral Health Nevada.

[Exhibit O](#) is written testimony in support of [Assembly Bill 193](#) presented by Michael Johnson, Director, Community Health Division, Southern Nevada Health District.

[Exhibit P](#) is written testimony in opposition to [Assembly Bill 193](#) from Truckee Meadows Water Authority, presented by Michael Pagni, representing Truckee Meadows Water Authority.

[Exhibit Q](#) is a letter in opposition to [Assembly Bill 193](#), dated March 3, 2017, to Chair Swank and members of the Assembly Committee on Natural Resources, Agriculture, and Mining, written and presented by Juanita Cox, Private Citizen, Reno, Nevada.

[Exhibit R](#) is written testimony in opposition to [Assembly Bill 193](#) presented by Katania Taylor, Private Citizen, Reno, Nevada.

[Exhibit S](#) is written testimony in opposition to [Assembly Bill 193](#) presented by Sara Yelowitz, Private Citizen, Reno, Nevada.

[Exhibit T](#) is written testimony in opposition to [Assembly Bill 193](#), dated March 7, 2017, presented by Fred Voltz, Private Citizen, Carson City, Nevada.

[Exhibit U](#) is written testimony dated March 6, 2017, in opposition to [Assembly Bill 193](#) presented by Joy Davis, Private Citizen, Reno, Nevada.

[Exhibit V](#) is written testimony in opposition to [Assembly Bill 193](#) provided by Laurie Yarborough, Private Citizen, Reno, Nevada.