

**Testimony of Jaret Wirtz, Western Area Water Supply Authority**  
**ND Legislative Management – Energy Development and Transmission Committee Joint**  
**Meeting with the Education Funding and Taxation Committee**  
**Williston State College, Williston, North Dakota**  
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**Introduction:**

Good afternoon Chairman Wardner, Chairwoman Kelsch, and Committee members. As Executive Director of the Western Area Water Supply Authority (WAWSA), I appreciate having this time today to speak about the impact of oil development on the water situation in northwest North Dakota, in particular the Western Area Water Supply Project, or as it is commonly known - WAWSP. To fully understand the impact and project as it stands today, I would like to briefly discuss the background of the project.

Each of the WAWSA founding members, including the City of Williston, the McKenzie County Water Resource District, the Williams Rural Water District, the R&T Water Supply Commerce Authority, and the Burke-Divide-Williams Rural Water System Association, had existing water issues ranging from water quality challenges to aging infrastructure to capacity limitations before oil production ramped up three years ago. These pre-existing issues combined with growing water demands due to the population growth and the need for large volumes of water for oil production created a water supply problem that needed to be solved quickly. The large industrial water demand also created opportunity to help pay for a large regional water supply project.

The WAWSA members have worked diligently to develop the opportunity to solve the water supply problem together. The signing of House Bill 1206 last May officially created the Western Area Water Supply Authority. The bill paved the way for the Bank of North Dakota to issue \$110 million in loans to get the WAWSP project started. The WAWSA fully understands that the funding provided is a loan and has been coordinating with oil companies, trucking companies, and other stakeholders in the region to supply them with industrial water to generate the revenue necessary to repay the loans.

**Current Status of the Project:**

Since receiving the \$110 million in loans, the WAWSP has made great progress in just one year. All Phase I projects have been bid and awarded. Phase I of the WAWSP began with the construction of the interim Williston By-Pass Transmission Line. It is now completely installed, with 10.5 miles of pipe in the ground. It extends north and west from Williston to the new industrial growth areas.

A five million gallon reservoir is currently under construction. It will connect to the interim bypass line that will serve all of the growing areas of Williston with fire flow protection and improved reliability. The final bypass line is scheduled for construction in 2013-2014.

In addition to Phase I project progress, the Authority has also advertised and awarded portions of Phase II. The transmission lines, pump stations, and reservoirs that will deliver water from Williston to the cities of Watford City and Ray (which will make additional water available for the cities of Watford City, Ray, Tioga, Stanley, Ross, Wildrose, Crosby, Columbus, Fortuna, and Ambrose) have gone through the bidding process. Phase II transmission bids came in at a total cost of \$39,918,997, which was a little less than anticipated, despite increasing the pipe sizes to accommodate population growth. These projects are scheduled to be completed by the end of 2012.

Additionally, expansion of the Williston Water Treatment Facility is under design to be expanded from 10 to 14 million gallons per day (MGD) is currently in the bidding phase. The Authority is also considering a bid alternate to accelerate the expansion of the Williston Water Treatment Facility from 14 to 21 MGD. Construction of the Williston Water Treatment Facility Expansion is expected to start in July of this year and be completed by the fall of 2013.

### **Impact of Oil Production:**

Oil production shows no sign of slowing down in the near future, and impacts will continue to be felt as the population grows exponentially. The populations of the WAWSP service area are difficult to predict, but are expected to peak by the year 2032 or slightly sooner. The WAWSA continually watches the growth patterns and has been making adjustments to respond to the trends. Already, the sizes of pipelines that will deliver drinking water to the north and south from the City of Williston (Cities of Crosby and Watford City) have been increased and additional users from multiple rural water sign-ups have been added to the system. The WAWSP may eventually serve as many as 75,000 people throughout the five county region.

The increased water demands from increase population was felt immediately when rural water system sign-ups doubled, and even tripled in some of the project area. The business plan for the WAWSP was completed in 2010, and since then, the population projections have continually been revised to account for the influx of people in the region. As an example, the McKenzie System IV Rural Water System in western McKenzie County was planned to have 120 users but ballooned to nearly 300 within the first few months of the project starting. While the increase in users was welcome, it also tripled the cost of service for this area.

Such unprecedented population growth has been, and will be a continuous challenge for the WAWSP and the region it serves. But the impacts of oil production do have some advantages as well. The oil industry is in desperate need of water for the hydraulic fracturing, or fracking, process. Oil companies will be able to purchase the extra water capacity from the project that homeowners and businesses aren't using currently (until population projections are met). The sale of the extra water is projected to pay for approximately 80% of the WAWSP's original price tag. The money that is brought in through industrial water sales will pay off loans from the state of North Dakota.

A side benefit to the region is that WAWSP has the capability to reduce wear and tear on county and township roads by placing its industrial water depots in strategic locations to lessen truck traffic. The impact of the reduced road repair costs is estimated to be a savings of \$29 million to \$51 million over the

next 20 years. There will also be a bonus effect of increased safety for other drivers, because there will be fewer trucks on the road.

### **Looking Towards the Future:**

As stated earlier, explosive population growth continues to impact demands for drinking water in the region. The importance of this project cannot be overstated. It is simply one of the most critical elements of infrastructure for northwest North Dakota.

We were honored on May 15 when Governor Jack Dalrymple and several other dignitaries attended a groundbreaking ceremony to officially kick off the installation of the WAWSP pipeline between Wildrose and Crosby as well as mark the one-year anniversary of the signing of House Bill 1206 which created the Authority. Because of the tireless work of the original bill sponsors, including Rep. Bob Skarphol of Tioga, Rep. George Keiser of Bismarck, Rep. Curt Kreun of Grand Forks, Sen. Stanley Lyson of Williston, Sen. David O'Connell of Lansford and the late Sen. Tom Fischer of Fargo as well as the members of the Authority, the WAWSP is now becoming reality.

But there is still much work to do. Expansions to elements of the system currently under construction as well as design and construction for Phases III and IV will need continued support from North Dakota legislators. The impacts from oil production in the area have now forced us to expand the system beyond what was originally conceptualized. WAWSA is currently completing a preliminary engineering effort to further define the total rural water need in the region, and as new population projections become available the project will continue to be revised. This expansion, of course, also affects the bottom line. The Authority has determined that the project will need approximately \$80 million of funding in the next biennium to meet the water demands of the region. Of this \$80 million, approximately \$60 million is estimated to complete the expanded original project (an increase from the \$40 million estimated in 2010). An additional \$20 million is needed to build initial rural expansion to meet part of the large increase in rural demands.

Every day brings new opportunities and challenges in the oil patch. The Authority is determined to do our part in providing good quality drinking water to the citizens of the region in order to minimize impacts and provide opportunities for the region to flourish during this historic time in our State.

On behalf of the Western Area Water Supply Authority and its Board of Directors, we want to express our appreciation for the time we were given today and look forward to the continued support and successful completion of the WAWSP over the next three years.