TONOPAH TOWN BOARD
PUBLIC WORKSHOP MINUTES
JANUARY 27, 2015
TONOPAH CONVENTION CENTER
301 Brougher Avenue, Tonopah, NV 89049

Tonopah Town Board Chairman Horace Carlyle called the public workshop to order January 27, 2015 at 5:05 p.m. Also present were Duane Downing, Tom Seley, Janet Hatch, and Doug Farinholt. Eight others were in attendance. Chairman Carlyle led in the Pledge of Allegiance.

Duane Downing was present after 5:09 p.m.

1. **Public Comment**

None.

2. **Discussion: Tonopah Public Utilities Final Draft Water System Master Plan for review as prepared by Shaw Engineering**

Town Manager James Eason introduced Paul Winkelman of Shaw Engineering. He added that the water project was started about four years ago. Phase 1 and 2 were completed through funding from the USDA. Today is the next step in the process.

Paul Winkelman explained that this is the first Water System Master Plan done for the Town of Tonopah. Individual studies have been done before but no system-wide report.

Mr. Winkelman explained most of the pages of the Water System Master Plan. The following pages were presented, the information in parentheses notes explanations or facts given:

- Why do a Water Master Plan?
- Figure 2.1 Town Boundary & Service Area (identified in Phase 1 and 2 of the study)
- Figure 2.2 Town Growth Area (where growth may occur in the next 20 years)
- Figure 2.3 - Customer and Flow Projections (projected 1% growth in customer population, projected 2% growth in water usage: about 850,000 gallons/day)
- Figure 2.4 Water Usage by Classification (less than 50% of the usage is by residential customers)
- Figure 2.5 - Average Day Demand (Pumped) (Joe Westerlund explained that the demand in 2011 was high because of "Allied Gold" needing a lot of water)
- Figure 2.6 - Average Day Flow Per ERU (Pumped)
- Single Family Residential: Water Fixture Unit Counts (Per UPC) (a larger home with more fixtures has the potential to use more water, this does not mean it is in fact using more water than a smaller home; Tonopah Town Ordinance stated that 15 fixture units equal one ERU; Paul Winkelman asked whether a typical home in Tonopah is a one bathroom home. Duane Downing stated that he thinks the average home is a three bedroom, 2 baths home and that the count should probably be around 20 fixture units. Paul Winkelman added that the State of Nevada figures an ERU uses 700 gallons a day, but the largest ERU usage in Tonopah was 265 gallons per day. The State allows towns to use their own numbers if they are actual numbers. Mr. Winkelman noted that Tonopah's numbers are very typical. Horace Carlyle asked what happens if a customer requests 700 gallons a day. Paul Winkelman noted that the Town Ordinance does not state what an ERU equals to. Tom Seley asked whether all water lost through leakage or overflow is accounted for in the plan which Mr. Winkelman affirmed. He inquired how the Town knows how much water was used by residential and how much by commercial

customers. Paul Winkelman explained that the Town has different meters to keep track of that.)

- Figure 2.7 - Maximum Day Demand (Pumped) (this is important as the Town has to know the maximum demand to be able to meet it; James Eason noted that the high demand in 2013 was a result of the Board's decision to change the watering schedule for the Parks.)
- Figure 2.8 - Maximum Day/Average Day Peak Factor
- Figure 2.9 - Diurnal Flows and Peak Hour Water Use
- Figure 2.10 - Monthly Average Demands (Pumped, 2013) (This is important to identify so that the Town knows when to do maintenance on water lines or what chlorine level to keep.)
- Figure 2.11 - Annual Unaccounted For Water (this may be a result of main breaks, unmetered/illegal connections, fires etc.; Joe Westerlund added that the meters in the well field are more accurate than the meters in Town. Duane Downing noted that the Town is losing money.)
- Daily Unaccounted For Water (needs to be monitored as the Town is losing capacity and money; Duane Downing noted that the numbers should improve drastically because of the new water system. Dan Tarnowski stated that older meters are not very accurate, especially not commercial ones. He explained that the cost for exchanging commercial meters would pay itself off after a few years.)
- Table 2.1 Flow Values Utilized in Water Master Plan
- Table 2.2 ERU's And Flows Utilized in Water Master Plan
- Figure 3.1 Overall Water System Plan (Joe Westerlund explained that the water gets chlorinated at Rye Patch)
- Major System Components
- Value of the Water System (the replacement value of the system is $30 Million; Duane Downing inquired how much the Town owes for the system. Chris Mulkerns explained that the Town owes $3.7 million for Phase 1 and $1.8 million Phase 2.)
- Figure 3.2 Overall Hydraulic Schematic (shows elevation differences, the water has to be pumped multiple times; Joe Westerlund added that the water trucks fill up at stations where the water only has to go through one pump.)
- Figure 3.7 - Arsenic Concentrations (water is blended to keep the water quality standard)
- Figure 3.8 – Nitrate Concentrations (nitrate levels are below the water quality standard; pump test stressed the system and levels did not change which means that more water can be pumped without levels rising)
- Figure 3.3 Town Water System-North
- Figure 3.4 Town Water System-South
- Figure 3.5 Town Water System Pressure Zone Boundaries
- Figure 3.6 Airport Water System
- Network Hydraulic Model (a means for "predicting the future"; required by the State of Nevada; time will make the model more accurate)
- Table 3.12 Fire Flow Requirements (water flow at hydrants has to be provided)
- Table 3.14 Fire Flow Storage Required per Hydraulic Zone (maximum amount of water needs to be stored in case of fire)
- Figure 3.9 Fire Flow Areas and Flow Testing (Joe Westerlund explained that 15 out of 20 hydrants were tested. Paul Winkelman added that certain hydrants were not tested as residential areas would have been flooded. Carl Newberry inquired what happens if Puckett Investment Company wants to extend. Paul Winkelman explained that the developer would have to inform the Town of what kind of development they are and how

much water usage they anticipate. James Eason noted that Puckett Investment Company purchased ERU's many years ago and those are already accounted for in the system. They are part of the Town's inventory, but are inactive. Joe Westerlund added that they own 62 ERU's. Carl Newberry inquired whether Tonopah has enough water to serve new developments. Paul Winkelman explained that any new customer has to fill out a service application stating how much water they need. Tonopah Public Utilities has to determine whether they can provide that. He added that there will be a projected 1000 ERU's more in the next 20 years. Carl Newberry asked whether there is a capability to bring in a new pipeline from the well fields to add ERU's and whether the State Water Engineer can take away water rights if not used. James Eason explained that he had talked to Senator Pete Goicoechea about this matter. He explained the situation in Pahrump and added that the State Water Engineer has allowed municipalities to bank water rights. Municipalities have the highest use and are protected. Tom Seley added that one has to show beneficial use once every five years. James Eason explained the situation of the well fields and stated that all of the water rights have been put to beneficial use.)

- Nevada Administrative Code and TPU Requirements (TPU needs to make sure new developers do not infringe on this; NAC requires Town to meet the average day demands with your most productive well not functioning; State allows pumping of water 24 hours a day, Joe Westerlund only wants to pump 20 hours a day.)
- Nevada Administrative Code requires that all water projects are completes in such a manner as to
- Table 4.13 Summary of Remaining ERU Capacities (there are only four ERU's left in Ararat Storage; At some point more storage should be brought in so that the Town will not have to use upper storage; New wells for Upper and Lower Depot PRV will have to be installed in the next 20 years if the projected 2% growth occurs.)
- Figure 4.1 Distribution System Deficient Areas (system has great fire fighting ability because of the pressure due to the difference in elevation)
- Table 4.14 Summary of Known Existing System Deficiencies (Rye Patch #2 Tank should probably be taken out of service)
- Recommended Projects (46 projects that total about $7.5 million)
- Table 5.18 Summary of Improvements and Ranking to Correct Existing System Deficiencies (ranking was discussed with Joe Westerlund; the top ten projects should be done in the next five years; average cost of $100,000 per year for these projects)
- Table 5.19 summary of Recommended Improvements to Accommodate Growth (ranking may change due to circumstances; Joe Westerlund stated that he had already talked to a company about projects 1 and 2. Project G3 included extending the main as the Town does not currently have the capacity to accommodate more customers in that area. James Eason asked whether costs for an engineer were included in the calculation which Paul Winkelman affirmed.)
- Concluding Comments

Horace Carlyle stated that an ERU means the right to connect to the Town's water system. He asked what foundation the Board should have for what they charge for an ERU as the Town needs to finance operation and maintenance. He noted that customers with inactive meters do not pay to have these meters or to have these meters turned on.

Janet Hatch stated that she appreciates the information given by Paul Winkelman, especially the ranking of projects. Doug Farinholt agreed and noted that serious decisions will have to be made in the future and that a lot of consideration will have to be put into it. He noted that the projects are expensive and that the Town will have to figure out how to pay for them. Duane Downing

stated that he expected most of the information as the Town has not invested much in the main distribution system within the Town. Tom Seley agreed and added that whether West Kirkland Mining will start mining in Tonopah might determine which projects need to be addressed first. He noted that the Town might have to develop potential impact fees.

James Eason pointed out that the Town has accomplished projects already and that they have a lot of options, such as grants, to accomplish more projects. He noted that the Town has a strong system and nothing can hurt it. Mr. Eason asked what the process would be if a new developer came in. Paul Winkelman explained that commercial usage usually is assigned based on acreage. Developers need to tell the Town of Tonopah what kind of development it is so that they can calculate the water demand. He added that the current ordinance states that they have to give TPU all the necessary information and that TPU has 30 days to respond to that application telling them how much they have to pay. Horace Carlyle noted that the fee schedule should be reviewed as different customers should be paying different fees. Paul Winkelman explained that the engineering cost necessary to determine the cost should be paid for by the developer. The Town Ordinance allows this. James Eason inquired who would pay for the upgrade of the infrastructure to which Paul Winkelman replied that this would also have to be paid by the developer. If the Town wanted to oversize the main past the development to use in the future, the Town could enter into an agreement to pay for that cost. The cost would be recovered through connection fees. Tom Seley noted that Horace Carlyle had a point on adjusting application fees due to how much staff time goes into determining how much the customer has to pay. James Eason asked how much a connection fee should be considering that the system is worth $30 million and whether $800 is enough. Horace Carlyle noted that this fee needs to be reviewed. Paul Winkelman explained that Reno bases their connection fee on the meter size and it is around $3,000 to $4,000. James Eason inquired whether the Master Plan accounts for all the inactive meters. Paul Winkelman noted that it does not matter where the growth is coming from. He added that a PRV needs to be moved into the "Ketten area" to provide enough pressure to every customer. He pointed out that pressure is a problem in that area as there is a six inch line connecting one customer higher in elevation. James Eason explained that the customer had put that line in decades ago and believes it is his line. Mr. Winkelman pointed out that the Town owns every line up to the meter. Moving the meter to the point of connection would mean the Town does not have to put an extra pump in. Duane Downing noted that the line might have leaks.

Paul Winkelman pointed out that the Water Study Master Plan has to be submitted to NVD, USDA, the State Water Engineer, the Department of Health, and the State Fire Marshall.

Joe Westerlund noted that the study has been a great learning experience. He added that he and some of the TPU employees met with Mr. Winkelman and he ran the hydraulic model for them. They also participated in a webinar with Mr. Winkelman.

Dan Tarnowski commended TPU on their work over the years. He noted that TPU has a proactive system and that they are taking care of their source, production, and transmission. He suggested looking at policies and procedures.

Bruce Jabbour stated that Paul Winkelman gave a great presentation. He inquired what determines whether an application from a customer would be denied. Paul Winkelman answered that an application is never denied, but that TPU would tell a customer what he needs to do to get service. James Eason gave the example that TPU would have to deny service to West Kirkland Mining as they would be a threat to the system and the existing customer base. Paul Winkelman

noted that TPU would not deny them service, but would tell them what measures have to be taken to serve them.

3. Public Comment

None.

4. Adjourn

The meeting adjourned at 8:05 p.m.

Minutes transcribed by:

Kat Galli, Deputy Town Clerk

Approved:

Horace Carlyle, Chairman

Duane Downing, Vice-Chairman

Tom Seley, Clerk

Janet Hatch, Member

Doug Farinholt, Member