ASHLAND WATER ADVISORY COMMITTEE
April 7, 2016

CALL TO ORDER
Williams called the meeting to order at 4:00 PM

Committee Members Present: Don Morris, Amy Patton, John Williams, Rich Miller, Joe Graf, and Alex Amarotico Pat Acklin Donna Rhee, and Lesley Adams
Committee Members Absent: Rich Whitley Councilor Carol Voisin Darrell Boldt, and Kate Jackson
Staff present: Scott Fleury, Mike Faught, Julie Smitherman, and Kyndra Irigoyen
Staff absent: Steve Walker and Greg Hunter

ANNOUNCEMENTS
None.

Public forum
None.

REVIEW PROPOSED MASTER PLAN
Smitherman introduced the consultant Lisa Maddaus, P.E. who will be presenting the software to the committee via telephone conference. Maddaus Water Management, Inc. is located in Sacramento, California. Smitherman gave a handout to the group with an overview of the projects the company has worked on over the years. Maddaus will discuss the DSS model, which is the least cost planning decision support system model and has been in use since 1999. It is used in 25 states across the country, internationally, and represents over 30 million people. Maddaus will also discuss the shared vision planning approach, which will help us update the water supply model.

Lisa Maddaus, P.E. joined the meeting via telephone conference and gave an overview of the tools in consideration. She presented the modeling tools on the television for everyone to view. First she reviewed the conservation model and then the climate model.

Maddaus said they work all over the country and like to think of themselves as adjunct staff, helping to navigate water resource decisions. The tool focuses on the water demand forecast and the conservation aspect of water balance. Maddaus Water Management, Inc. will work hands on with Smitherman to train and support her in managing the program for the City of Ashland. Typically the company will manage the data, but in our case, Smitherman will be trained and manage the data with the assistance from Maddaus.

The model is sophisticated and runs on the level of energy utility model, customer level data, not individual, but customer category. It graphs production data and consumption data for different customer types while placing them in billing category groups. Maddaus then develops a profile to look at different trends and from there they track what is happening. She said they can understand the growth productions as well. They have the ability to do different demand scenario planning because the system is very pragmatic.

Don asked about the implementation of the model into the city and how long it would take to get in place? Maddaus said it will take six to eight months to be implemented, the quickest is three months. The most time will be spent on inputting the consumption data into the model and designing the measures. Using it

going forward, there are regular updates, at least annual summaries. A handful use it directly, and the majority are annual updates to boards. Smitherman said we have the ability to update it as much as we want.

Faught asked how does this tool help this commission if they are trying to aim for a 10%, 15%, or 20% conservation and what the impacts will be, how does this program help us with that. Maddaus said she would refer to the program scenarios. She said they could build a program that would ask what would 10% or 15% save. This program shows what the existing measures are. Internally it would include water loss, pricing, incentive programs the city has and the benchmark would be everything on the list. There could be 12-20 measures used. It is possible to choose different percent level or see the results on the backend and see how much is cost effective to save. Everything in this model will be customized for Ashland.

Smitherman said that once we input all of our data we will have this model indefinitely. We can adjust as we move forward and use it as much as we want to. Parameters and scenarios can be changed to our needs.

Williams asked if this program is web based. Maddaus said no it is not, but it is a future vision.

Maddaus reviewed the climate model next. She said this is a supporting tool that can check water shortage simulation, drought simulation, water supply reliability, and it also runs at a macro level water balance. They pick custom scenarios for the forecasts. Numerous different pieces are built and then tested under different conditions. She said system shortfalls are checked to see what the magnitude of how short your system is. It offers different solutions to figure out the shortage. Everything will be customized to the city's needs.

Rhee asked how dependent will we be on them. Smitherman said we will not heavily rely on them, but they are there to help us when we need. Morris asked when the model will be turned over to us. Smitherman said immediately. Faught said Smitherman is building the whole program with their help. It will take three months to input all of the data. Whatever program we think will be good for our community, we will input the program into the climate change model.

Graf said the conservation model is a powerful tool to see the possibilities. He said the climate change model seems overkill for our situation. Since we only have the inflow to the Reeder Reservoir to go off of. Faught said both models are $50,000 each. Graf said we will still need someone to tell us how climate change is going to affect precipitation in the watershed and how that will affect what is going into the reservoir, someone has to do that in order to feed it into the spreadsheet.

Acklin said last time we had the best people analyzing our climate change, but you don't know until it happens.

Jeff Ballard, RH2 Engineering said this tool allows you to update as new information comes in. It allows you to look at other options in your situation such as what it impacts, what level of water is needed from TID vs. the spring flows from Reeder Reservoirs, how much water is needed to get from Medford Water Commission – if these are the situations, this tool helps you balance the water. It is not meant to be a climate analysis, but a water balance tool.

Graf said his question is whether we need a $50,000 Excel spreadsheet to do this for climate. He understands using it for the conservation model. Williams said the question for him is the time and energy to go into this, there are some opportunity costs. Faught said from staff's perspective, while it is nice to say

everything is built in spreadsheets, but we really have not modeled them forward. The nice thing about the model is we have real time data all the time. Instead of getting the information each time and have the staff pull data, we can just add to it in the model and make decisions faster. This is a onetime cost and then we will have the model forever.

Williams asked what the alternatives are if we do not get this model. Faught said we will use our assumptions like we have done in the past, with assistance from a consultant. Instead of using a consultant we will be able to manage and look at the model ourselves. He said we were one of few who included a climate change model in our water master plan and it was not conservative enough because we did not foresee three drought years in a row. He said he would like to adjust in real time when it does happen. We can do it the way we did before, but these tools are more beneficial for us.

Fleury said the biggest portion of the master plan is the CIP. When you are looking at spending $100,000 for two programs, the water balances, the supply demand projection, they have more accurate and real time data it allows them to better assess what you need for your capital projects in the future. You could save yourself hundreds of thousands of dollars in the future just by having this tool. As we go along and do master plan updates, this tool would be available, it would be easier and faster to continually refine analysis and move forward.

Williams said these people are in the dark ages of software development. It should be a web app. He said he liked the water conservation model better than the drought model.

Morris asked if staff could do a cost benefit analysis to get a sense of how this will benefit us long term.

Acklin asked if this is the best program that is out there and how staff arrived to this company. Smitherman said out of all of the proposals we got, no one made us feel as comfortable as this company did, especially for what we were asking. The rest of them were offering what we already had done with our excel spreadsheets. Maddaus takes our data to the next level.

Morris said the greatest benefit from this is having a more orderly and systematic way of doing things.

Faught said we need support from the committee to take to the council.

Acklin/Graf m/s the Ashland Water Advisory Committee recommend that staff purchase the Maddaus Conservation Management model. All in favor.

Acklin/Morris m/s the Ashland Water Advisory Committee recommend that staff purchase the Maddaus Climate Management model. All in favor.

Meeting adjourned at 5:32pm.

Respectfully submitted,
Kyndra Irigoyen
Public Works Administrative Assistant