



JANUARY 8, 2020
WATER CONSERVATION AND DROUGHT MANAGEMENT
ADVISORY BOARD
SPECIAL MEETING 2:00 P.M.

City Council Chambers
217 East Center Street
Moab, Utah 84532

1. Call To Order
2. Approval Of Minutes

Documents:

[WB-09.11.2019 MINUTES DRAFT.PDF](#)
[WB-10.02.2019 MINUTES DRAFT.PDF](#)
[WB-10.09.2019 MINUTES DRAFT.PDF](#)
[WB-11-13-2019 MINUTES DRAFT.PDF](#)

3. Citizens To Be Heard
4. Board And Staff Reports
5. Nomination And Selection Of Board Chair
6. Adopt 2020 Regular Meeting Schedule

Documents:

[2020 MEETING SCHEDULE.PDF](#)

7. Presentation And Discussion Of Role Of The Advisory Board
8. 2020 Visioning And Goal Setting Workshop And Discussion
9. Adjournment

Special Accommodations:

In compliance with the Americans with Disabilities Act, individuals needing special accommodations during this meeting should notify the Recorder's Office at 217 East Center Street, Moab, Utah 84532; or phone (435) 259-5121 at least three (3) working days prior to the meeting.

Check our website for updates at: www.moabcity.org

**MOAB CITY
WATER CONSERVATION AND DROUGHT MANAGEMENT
ADVISORY BOARD REGULAR MEETING MINUTES -- DRAFT
SEPTEMBER 11, 2019**

Regular Meeting & Attendance: The Moab City Water Conservation and Drought Management Advisory Board held a Regular Meeting on the above date in the City Council Chambers at the Moab City Center, located at 217 East Center Street, Moab, Utah. An audio recording of the meeting is archived at www.utah.gov/pmn/index.html. A video recording is archived at: <https://www.youtube.com/watch?v=i9bM2eNWYkY&t=1614s>.

Call to Order: Board Chair Kara Dohrenwend called the meeting to order at 2:02 PM. In attendance were Board Chair Kara Dohrenwend and Board Members Kyle Bailey, Arne Hultquist, Jeremy Lynch, John Gould, Denver Perkins and Mike Duncan. Staff in attendance were Sustainability Director Rosemarie Russo, Assistant Engineer Eric Johanson and Deputy Recorder Joey Allred. Two members of the public and media were present.

Approval of the August 14, 2019 Meeting Minutes: Board Member Duncan moved to approve the minutes with corrections. Board Member Gould seconded the motion. Board member Hultquist asked if the minutes could have more detail in the future, and Allred said that she would do that. The motion passed 7-0 with Board Members Dohrenwend, Bailey, Hultquist, Lynch, Gould, Perkins and Duncan voting aye.

Citizens to be Heard: Bill Agee has recently moved to the area. His education is in Geosciences Studies and he has 30 years of practical experience with environmental challenges. He offered to help with any technical questions regarding hydrology that the Board might have.

Board and Staff Reports:

Overnight Accommodation Water Use:

Rosemarie mentioned that as new Overnight Accommodations regulations are being drafted, it would be time critical to provide water conservation recommendations. The Sustainability Office has forwarded the following recommendations to the City Planning Department and Grand County:

- Amend commercial building codes to require buildings greater than 5,000 square feet to install gray water systems and require all buildings have WaterSense fixtures and rain catchment systems.
- Incentivize rain catchments as dual storm water management and non-potable supply for irrigation for residential structures.
- Review and amend water conservation regulations to achieve consistency among the City, Grand County, and San Juan County
- Require sediment traps, bio-retention buffers/swales, and pervious pavement to slow runoff in new developments.
- Pursue grants or consider setting aside storm water management fees to fund landscaping incentives equaling \$45,000 for residents and \$5,000 for commercial customers to slow the flow and reduce erosion (i.e., terracing, ponds, gravel pits).

- Increase education and availability of mulch.

Sustainability Director Russo reported that in regard to the housing segment of the tourist industry, hotels use 1/3 of the water in that category and overnight rentals account for 2/3.

Board Member Gould needed to leave the meeting early and it was suggested that the agenda be adjusted to make sure that he could be present for the items that required possible actions. Board Member Bailey moved to adjust the agenda. Board Member Hultquist seconded the motion. The motion passed 7-0 with Board Members Dohrenwend, Bailey, Hultquist, Lynch, Gould, Perkins and Duncan voting aye.

Other Business

VCAP Update And Recommendations On Avoiding Groundwater Depletion. Specifically: Use Of Moab City Springs Winter Overflow By Grand Water And Sewer Service Agency

Discussion: Johanson asked Grand Water and Sewer Service Agency Manager Dana Van Horn to join him for this discussion item. Johanson and Van Horn discussed how the winter overflow water from the Power Dam goes into the river. The City is currently seeking funding to buy a 3,000,000-gallon tank that would be able to capture and store this overflow but does not have access to it at this time. It has been proposed that the winter overflow be piped into Grand Water and Sewer Service (GWSSA) hold tanks until the 3,000,000-gallon tank is in place to avoid the community losing that water. An investigation might be needed to find out how much overflow is going into the river, how much of it will the 3,000,000-gallon tank hold, where would the city hook into the GWSSA lines, what physical infrastructure would be needed to accomplish this task, what is the mechanism for the City to sell water to someone else (who decides), and how would the sale be structured for it to work for both agencies? The purpose would be to not to lose the water and a contract could be set up so that when the City has extra water it would go to GWSSA and when the City doesn't have any extra water nothing would be go to GWSSA. Extensive discussion followed on this matter. Both the City and GWSSA staff will need to work out the details

Motion and vote: Board Member Hultquist moved to approve that a recommendation be sent to the City Manager that the City get together and engage GWSSA in talks to facilitate winter overflow sales of Moab City winter overflow to GWSSA. Board Member Lynch seconded the motion. The motion passed 7-0. with Board Members Hultquist, Lynch, Bailey, Dohrenwend, Gould, Perkins and Duncan voting aye.

Assistant City Engineer Johanson announced a meeting on September 19th at 1:30 where Ken Kolm could call in. That date didn't work for some of the Board Members that wanted to be included. Discussion followed. The meeting will be held as scheduled in City Engineer Williams's office and Kolm will call in.

Final USGS Report And Its Findings Impact On The Kolm Groundwater

Model/HESA: Board Member Hultquist provided a Summary of Important Points from the USGS Report. He said that the USGS Report is finalized and the Council will want to know what it is in it, but it is a 64-page document, so he created a draft summary of 13 important points from that document for the Council. He told the Board that they didn't need to go through them at this point in time and that the Board could add to them if they wished. He said that they needed to start discussion on what points they were going to send to Council for them to use to

make policy decisions. He noted that the report made no attempt to decipher the amount of water in each of the water pathways. Discussion followed regarding points made in the USGS Report and how some of them differ from the Ken Kolm Report. Hultquist will make some minor changes and get the document to Allred so that she can get a “shared working document” out to the Board. The Board would like to have the document with the page numbers referenced on the summary points completed before the meeting with Ken Kolm. The Board discussed some major points of disagreement between the two reports that the City Council needs to be aware of. The first was the age of the water in the Glen Canyon Aquifer. The second was the point at which snowmelt from the La Sal Mountains enters the aquifer-directly as mountain flow, or at the French drain in Mill Creek where the creek runs by the Golf Course. The last was that the stream flow numbers for Mill Creek do not indicate that the net gain of water to the Glen Canyon Aquifer does not equal the amount that would have to enter it in order to account for the 2,000+ AF that come from the city’s well and springs in Old City Park.

State of Utah Department of Natural Resources Division of Water Resources Local Conservation Goal Program:

Discussion: Hultquist brought this to the Board’s attention as the public comment period ends September 25th and the program directly affects the City’s water conservation goals, as well as GWSSA’s. He said that the State has some really good ideas, but if the Board wants to comment on the State’s new regional goals, it would need to be done at this meeting to make the comment deadline. He had drafted a comment letter for the State and the Board reviewed that letter with a map and details from the State goals. The Board liked the State goals but wondered if they were realistic for this particular area as opposed to Salt Lake City. Discussion followed regarding the City and the County’s goals and how they might relate to the State goals.

Motion and vote: Board Member Hultquist moved to approve that he will re-write the draft comment letter incorporating comments from the Board at this point in time. It will then be redistributed to the Board for any more comments and wordsmithing that they would like and he4 will deliver it to Board Chair Dohrenwend with those comments and she can forward it on to the City Manager. Board Member Lynch seconded the motion. The motion passed 6-0 with Board Members Hultquist, Lynch, Bailey, Dohrenwend, Perkins and Duncan voting aye. Board Member Gould left the meeting at 3:37 PM.

Manti-La Sal Forest Plan Draft:

Discussion: There was no discussion.

Motion and vote: Board member Hultquist moved to table this topic until the next agenda. Board Member Lynch seconded the motion. The motion passed 7-0 with Board Members Dohrenwend, Bailey, Hultquist, Lynch, Gould, Perkins and Duncan voting aye.

Peer Review Of Kolm Phase I And Phase II Report:

There was discussion of when the report would become available. This item was then deferred to next month’s agenda after the meeting with Ken Kolm.

State of Utah DNR/UDWR’e Watershed Coordinating Council Draft Legislation:

Discussion: Tabled for next month’s agenda.

Moab City’s Water Conservation Public Outreach Update:

Discussion: Board Member Hultquist stated that they are changing seasons at this time and he encouraged the Board’s Public Outreach to get some messages out stating that people can start watering less. Russo said that on September 29th, they will be giving away water conservation kits at the Grand Center from 11:00 AM to 1:30 PM and at the library from 3:00

PM to 4:00 PM as part of Climate Week. Board Chair Dohrenwend instructed that this should be a standing item on the agenda.

Moab Water Facts 2019 Revision:

Discussion: The Water Facts sheet is difficult to read as edits and/or comments appear as bubbles that cover the text and the detail of the edit and/or comments don't show. Discussion followed on how it should be laid out. Russo will make a few changes and this item will be on the next agenda and Public Works Director Antillon will be invited to attend.

Mani-La Sal Forest Plan Draft—Discussion And Possible Action:

Discussion: This item will be moved to the next agenda and Oscar Antillon will be asked to attend.

Russo stated that she had gone through the VCAP Report and that she would put together a summary sheet before the next meeting.

Adjournment: Board member Perkins moved to adjourn at 3:59 p.m.

DRAFT

**MOAB CITY
WATER CONSERVATION AND DROUGHT MANAGEMENT
ADVISORY BOARD SPECIAL MEETING MINUTES -- DRAFT
OCTOBER 2, 2019**

Regular Meeting & Attendance: The Moab City Water Conservation and Drought Management Advisory Board held a Special Meeting on the above date in the City Council Chambers at the Moab City Center, located at 217 East Center Street, Moab, Utah. An audio recording of the meeting is archived at www.utah.gov/pmn/index.html. A video recording is archived at:

https://www.youtube.com/watch?v=tb0Z08qw2_w

Call to Order: Board Chair Kara Dohrenwend called the meeting to order at 2:35 PM. In attendance were Board Chair Kara Dohrenwend and Board Members Kyle Bailey, Arne Hultquist, Mike Duncan and Denver Perkins. Staff in attendance were City Engineer, Chuck Williams, Assistant Engineer Eric Johanson, Assistant Engineer Mark Jolissaint and Deputy Recorder Joey Allred.

REVIEW KEN KOMLS REPORT, AND QUESTIONS THAT BOARD MEMBERS HAVE ABOUT HOW IT RELATES TO THE USGS REPORT:

Ken Kolm and Paul van der Heijde called in and asked to go over the summary of important points written by Board member Hultquist. Board Chair Dohrenwend decided to address Board member Duncan's remarks first. There was extensive discussion regarding how Kolm's report differed from the USGS report. Duncan felt like Kolm was throwing away good data and not taking advantage of the fact that the surface water has to balance year in and year out. Van der Heijde said that the base flow focused off of the measurements by Blanchard. The base flow comes from the groundwater contribution to the surface runoff. There is a continuous flow from groundwater to surface water.

Board member Hultquist addressed Kolm and van der Heijde regarding a groundwater/surface water model and how their report differs from the USGS report. Extensive discussion followed. Kolm had done a model in 1991. The models today have the chemistry needed to determine that there other things going on.

Hultquist displayed a power point presentation showing three different flow paths. They are the Pack Creek, Glen Canyon Group and Mill Creek. He said that Kolm had come up with a conceptual model and said that, "there was water in Mill Creek that was directly recharging the Glen Canyon Group at the lower end below 7000 feet. I told you that I disagreed with you, unequivocally. I said the reason why is that isotopes that were associated with the Glen Canyon Group were different than those in Mill Creek. At that time, you said, 'well that's a draft report and I'll wait till it comes out final.' It has come out final. Extensive discussion followed with comparisons of the Kolm and USGS conceptual models." Hultquist wants a peer review of the Kolm report.

Dohrenwend said that what she was seeing was two differing opinions and the Board was being told, "well just trust us," and we need more data. Dohrenwend also wants a peer review of the Kolm report.

Adjournment: Board member Baily moved to adjourn at 4:10 p.m.

DRAFT

**MOAB CITY
WATER CONSERVATION AND DROUGHT MANAGEMENT
ADVISORY BOARD REGULAR MEETING MINUTES -- DRAFT
OCTOBER 9, 2019**

Regular Meeting & Attendance: The Moab City Water Conservation and Drought Management Advisory Board held a Regular Meeting on the above date in the City Council Chambers at the Moab City Center, located at 217 East Center Street, Moab, Utah. An audio recording of the meeting is archived at www.utah.gov/pmn/index.html. A video recording is archived at: <https://www.youtube.com/watch?v=-coDY1Vn0XU&t=72s>.

Call to Order: Board Chair Kara Dohrenwend called the meeting to order at 2:05 PM. In attendance were Board Chair Kara Dohrenwend and Board Members, Arne Hultquist, Jeremy Lynch, Denver Perkins and Jeremy Lynch. Board members Kyle Bailey, Mike Duncan and John Gould were absent. Staff in attendance were Sustainability Director Rosemarie Russo, Assistant Engineer Eric Johanson, Assistant City Manager Carly Castle and Deputy Recorder Joey Allred. No members of the public or media were present.

Citizens to be Heard: there were no citizens to be heard.

Moab Water Facts Sheet Review:

Discussion: Russo said that her confusion of the Facts Sheet was that it now encompassed two different years. She felt that they should have one for 2018 and one for 2019. She also suggested that they create two sheets with one being more technical and one in layman's terms as the whole idea of the Facts Sheet was to have something that the general public could understand. Johanson agreed. Board Chair Dohrenwend said that the way the sheet had evolved was making it difficult for her find what comment goes with which water fact. It has gotten convoluted and is no longer user friendly. Further discussion followed regarding the Facts Sheet and Duncan and Williams's comments on it. Russo will update the Facts Sheet correcting errors and clear up the confusion. Johanson and Russo suggested that they wait on this item until Board member Duncan could be there as he was working on the comments. This item will be placed on the next meeting's agenda.

Update On Public Outreach:

Discussion: Board member Lynch reported that he had completed making Facebook postings for the rest of the year and City Communications and Engagement Manager Church will be posting them periodically. Dohrenwend stated that she had lost track of when they were supposed to be doing quarterly outreach. She reminded Russo that she was supposed to have put together a plan of when they were supposed to be doing different outreach, but she had never seen a final draft of that or what she should or shouldn't be doing in relation to outreach, so she hasn't been doing anything. Russo stated that Dohrenwend had submitted an article about watering. Russo put in an article about how it's a change of season and people need to ratchet down their watering, and the last thing for 2019 is the water efficiency kits that will be going out to residents. Dohrenwend would like to know how they will be dealing with this next year. She thought there was going to be a plan that they could talk about during meetings to inform everyone of what was coming up. Russo said that she would touch base with Church and see what they can do. Board member Hultquist asked if they were going to be getting PSA's out to KZMU and KCYN saying that it's time to ratchet down the water and also get something in the newspapers. Dohrenwend said that she was confused and wanted to know if it was the Board's

responsibility to do such things, or if it was the responsibility of City staff? Russo stated that she would “take care of it.” Russo stated that last week was Climate Week and they gave out 60 conservation kits and she just received a delivery of about 400 more. There was a radio Water Show on the air at KZMU on October 2nd. Assistant City Engineer Johanson and John Weisheit were on the show. Board member Perkins thought that it was very well done, and they were invited back. There was discussion about using the recording on the City’s social media website. Russo said that she would get the link to Allred so that it could be shared with the Board.

Manti La Sal Forest Plan Draft:

Discussion: Public Works Director Antillon was not present and there was no discussion.

USGS Report And Findings:

Discussion: Hultquist thought that it would be best to have bullet points and succinct sentences that were just a statement of facts and not a theoretical discussion for presentation to Council. Johanson thought that a little background should be included, as well as what prompted the study to be done. Russo thought that it should only mention that there are two ways to do modeling. The Ken Kolm references will be removed. The Board moved on through the rest of the agenda while Hultquist finished the changes recommended by the Board so that they could still review it before the meeting ended.

Motion and vote: Board member Hultquist moved to approve this document, with edits from the Board, for dissemination for the City Council. Board member Lynch seconded the motion. The motion passed 4-0 with Board members Hultquist, Lynch, Dohrenwend and Perkins voting aye.

VCAP (Vulnerability, Consequences and Adaptation Planning):

Discussion: Russo stated that she and Hultquist will be presenting to the Council on this topic on October 22nd and directed the Board to look at her notes from their radio interview. The take-a-way was that even during years of normal precipitation, the City is going to have mild drought conditions and that is the new normal in Spanish Valley. She also stated that the water is going to come in a shorter period of time, so there will be more intense storms, so they will need to do stormwater management. There will also be more frequent and more severe wildfires. Hultquist stated that the usual 50-year flood will actually be coming about every 10 years. There will be an almost 20% decrease in the amount of water currently available by the year 2050. Hultquist stated that he had seen a letter from the state and that there were several suggestions in it. He said that there were a lot of regulations for new development that he thought that the Board should consider. A lot of the regulations had to do with indoor plumbing. Turf on commercial properties could be regulated to a certain amount of square feet. He said that there were also some things in the action items of the VCAP report, but he would like the report to be finalized before they discuss it in their Board meetings about them recommending ordinances for the City that came out of the VCAPS discussion. Russo agreed saying “yeah, things like rain catchment and greywater.” This item will be on the next meeting’s agenda to talk about VCAPS informed next steps and to strategize. The Board would like the Public Works Director to attend the next meeting regarding the City and Grand Water and Sewer (GWSSA) working together to come up with a way for the City’s overflow to go to GWSSA so that it can be used rather than having it run into the river. Hultquist believes that it has to come through the Public Works Department because they are the ones who run the springs. Hultquist suggested that they send Public Works Director Antillon a message immediately, while they were still in the meeting. He said that he and Russo could suggest that the City consider such an agreement. He didn’t think that they needed Council to approve this action, he thought it was a “direct staff” type of thing.

Dohrenwend said that she didn't think it was direct staff and that they would need to send it through the City Manager. Allred explained to the Board that Board member/City Councilmember Duncan had already told Council about it during his Council report and that City Manager Linares had said that it had to go through Council and a review. Assistant City Manager Castle asked if there was a proposal. She said that it sounds like Council wants to be involved and they will probably want to vet it as staff to understand its viability. How to manage resources is ultimately up to the Public Works director and the City Manager, they would be happy to hear the Advisory Board's opinions. This item will be on the next agenda to find out how the presentation to Council went and how the Board wants to move through any recommendations to Council concerning ordinances or other things.

Local Water Conservation Goal Program:

Discussion: There was discussion on what had already been done. Hultquist had drafted a letter that had been forwarded to the City Manager to review and forward on to the State if he felt it was appropriate. The Board was not aware of whether or not the letter had been sent on from the City Manager. Russo said that she would follow-up with the City Manager and report back at the next meeting.

Motion and vote: Board member Hultquist moved to table this topic until the next agenda. Board Member Lynch seconded the motion. The motion passed 7-0 with Board Members Dohrenwend, Bailey, Hultquist, Lynch, Gould, Perkins and Duncan voting aye.

Watershed Coordination Council Draft Legislation:

Discussion: There had been no follow-up

Board Member Terms:

Discussion: Board members Hultquist and Dohrenwend have terms expiring in December. Dohrenwend said that there were a few members of the community who have expressed interest in serving and she felt that the Board should talk about it. She wasn't sure if Hultquist or herself wanted to continue or not, or what the Board thinks. She felt that "there is value in people coming in and out and getting more people involved. Board member Lynch asked if either or both of them were interested in another term? Then he asked, "do we recruit?" It was decided that this item be deferred to next month's meeting as a Discussion and Possible Action item. Hultquist felt that he was in too deep to stop now. Perkins felt that this would be a bad time to have to replace either of them. Dohrenwend said that she had been on the Planning Commission for over 10 years and she's been on this Board for a little while. She said, "I do, personally, object to when people get onto these things and then stay forever." She wasn't saying that she thought that was what was happening because the Board was only formed two and a half years ago. She does believe that it's worthwhile to have a standing list of people and make sure the Board is ready because this sneaks up on them every year. Perkins felt that the Board should recommend that Dohrenwend and Hultquist re-up for two more years and that they get a list of people who have expressed an interest in the Board. As two Board members were absent, Dohrenwend didn't think that they should vote on it at this meeting. She suggested that this item be deferred to the next meeting.

Other Business:

Discussion: Hultquist reported on what had happened at the meeting with Ken Kolm and Paul van der Heijde in regard to their report.

Adjournment: Board member Hultquist moved to adjourn at 3:35 p.m. Board member Perkins seconded the motion. The motion passed 4-0 with Board members Hultquist, Perkins,

Dohrenwend and Lynch voting aye.

DRAFT

**MOAB CITY
WATER CONSERVATION AND DROUGHT MANAGEMENT
ADVISORY BOARD REGULAR MEETING MINUTES -- DRAFT
NOVEMBER 13, 2019**

Regular Meeting & Attendance: The Moab City Water Conservation and Drought Management Advisory Board held a Regular Meeting on the above date in the City Council Chambers at the Moab City Center, located at 217 East Center Street, Moab, Utah. An audio recording of the meeting is archived at www.utah.gov/pmn/index.html. A video recording is archived at: <https://www.youtube.com/watch?v=-rTdPgU16LhM>.

Call to Order: Board Chair Kara Dohrenwend called the meeting to order at 2:00 PM. In attendance were Board Chair Kara Dohrenwend and Board Members, Arne Hultquist, Kyle Bailey, Jeremy Lynch, Denver Perkins and Mike Duncan. Board member John Gould was absent. Staff in attendance were Sustainability Director Rosemarie Russo, Public Works Director Oscar Antillon, Assistant Engineer Eric Johanson, Assistant City Manager Carly Castle, Water Superintendent Levi Jones, Code Compliance Specialist Mona Pompili and Deputy Recorder Joey Allred. Three members of the public or media were present.

Citizens to be Heard: there were no citizens to be heard.

Board Chair Dohrenwend suggested that the agenda be adjusted so that they could discuss New Business before Old Business.

Motion and Vote: Board Member Hultquist move to approve that the agenda be adjusted to discuss New Business before Old Business. Board member Bailey seconded the motion. The motion passed 6-0 with Board members Dohrenwend, Hultquist, Bailey, Lynch, Perkins, and Duncan voting aye.

Board and Staff Reports:

Board Member Hultquist noted that the Water Quality Board was here last week. They proposed the new grey water rules for the state and have moved toward a rule making process. They should have feasible greywater rules in the state literature by March 2020.

Board Member Duncan said that he had spoken with some of the staff of Community Rebuilds at the Arroyo Crossing celebration. They are contemplating that no water leaves the site by using a greywater system for landscape watering and the blackwater will be going into composting and then used as fertilizer.

Board Member Terms:

Recommendation to Council:

Discussion: Board Chair Dohrenwend stated that Board Member Hultquist and herself were interested in continuing to serve on the Board.

Motion and Vote: Board Member Lynch moved to approve forwarding a recommendation to Council recommending that Board members Kara Dohrenwend and Arne Hultquist be appointed for the open seats on the Board for the year 2020. Board member Duncan seconded the motion. The motion passed 6-0 with Board members Dohrenwend, Hultquist, Bailey, Lynch, Perkins, and Duncan voting aye.

Water Conservation Ordinances With New Greywater Rule:

Discussion: Board Member Hultquist talked about indoor water use and what people do with it afterward. The Greywater Rule is more of an indoor water ordinance and will be ready to go in March. It has a lot of support in the community and it is inexpensive to stub it in during a new build and it can work for both residential and commercial properties. Hultquist would like to recommend that the City insist that new developments include greywater options in the new planning rules and have the stubbing in for the system be a requirement. Environmental Health Director of the Southeast Utah Health Department Orion Rogers came up to answer questions. He stated that greywater is the water from the shower, washer, bathtub and bathroom sink. If a homeowner is required to stub out when building a new home, it doesn't mean that they are required to use it, but it will give the homeowners a choice. It is extremely cost prohibitive to insist that homes that have already been constructed try to install a greywater system. Commercial properties would need to have tanks and pumps. There two different types of systems. The tier 1 system is simple and can be designed in-house by the Health Department and the tier 2 system would require someone with a level two certification. Motels would require engineering and someone to have wastewater certifications. Russo asked about costs and Rogers told the Board that the cost for a single home permit is \$325 and \$75 for the site visit and the permit is only required if a homeowner wants to use greywater. A permit isn't needed for stubbing the system in to be able to use it at some point in the future. It would be simple to install a greywater system for a single-family home but hotels using grey water would need engineering to make determinations on how much of the greywater they will be able to use, and any overflow would be sent to the sewer as required. No determination of the cost for motels has been determined as yet. Board Member Duncan asked Rogers if there was a file or link that he could go to that describes what had been discussed. Rogers will send a document to Allred that was originally put out by Santa Barbara, California regarding a branch drain system and that is what they added to the Arroyo Crossing project, she will forward it on to the Board. Duncan asked about incremental costs for projects like Walnut Lane and Rogers said that he wasn't sure because he hasn't seen it done yet. Rogers invited the Board to tour a project that is utilizing a greywater system. There was further discussion. This item will be placed on the next agenda as a "Discussion and Possible Action" item. Russo will get a case study out to Allred to forward to the Board.

The Board moved on to discuss San Juan County's Outdoor Water Conservation Ordinances. Board Chair Dohrenwend thought that looking at water efficient landscaping requirements of some kind is worth doing. She went over several of the standards in the Ordinances that get very specific. There were some good ones and there were some that she didn't agree with but felt that it was a good place to start the discussion of what the Board wants to be recommending to Council. Dohrenwend will work on using this document to create something that the Board believes will work for the City of Moab. There was some discussion of where the Board could go with this. Board Member Duncan said that he thought that these were worthwhile goals, but he was "thinking ahead from a Council's point of view." He said that if the Board were to write a rule like this, they'd phase it over a respectable length of time and possibly provide some incentives. Dohrenwend stated that the process would be that if the Board that thought that something was advisable, they would recommend to the City that the Planning Commission would need to look at it because it would have to go through the Planning Department to decide how it would fit in with the rest of the code and then it would go from Planning Commission to City Council. Assistant City Manager Castle said that it looks pretty technical and was sure that it would have city wide implications. She asked the Board if they would like to spend a year on this or if they would like to find some priority sections and start picking at it over a couple of years. She said

that it would be an intensive process, staff would have to vet it, and the Planning Commission and City Council review and discuss it and it would be going back and forth to the Board for refinement. Board Member Duncan said that the City is already employing tiered water rates at this time and wondered if they should look at manipulating them for a possible increase to encourage residents to conserve water. Russo said that the City Finance Director is looking at the current water rates and doing a study. A discussion item on Outdoor Water Conservation Ordinances will be on the next agenda.

Moab Water Facts Sheet Review:

Discussion: There was discussion regarding the several different versions and revisions of the Facts Sheet. Duncan asked if the Board would look at the simple Water Fact Sheet that he had made for Council Candidates who were up for re-election. Perkins agreed saying that the other sheet is pretty technical, and he thinks that they really need something to give to Council that is understandable at a single reading, in layman's terms. The Board reviewed the simple Water Facts Sheet drafted by Duncan and made suggestions on what changes might be needed. Board Chair Dohrenwend recommended that a section of the minutes be "Homework for the Board" from now on. The homework for the next meeting will be to get comments back to Duncan so that he can re-draft the document. Dohrenwend asked Russo to review how to keep the Water Facts Sheet and the Quick Water Facts as complimentary pieces but have one for the intermediate level and for beginners.

Resolution No. 30-2019: A Resolution Adopting Vulnerability, Consequences, and Adaptation Planning Scenarios (VCAPS):

Discussion: Russo said that she and Hultquist thought that it would be good for the Board look at some of the recommendations from Council such as: How do you deal with groundwater depletion? And, how do you deal with extreme precipitation? The Board discussed possible landscaping incentives and grants that might be possible for residents to install more water conserving landscaping. There was extensive discussion regarding storm water, ground water depth, drains, etc. Council is going to review and bring it back on another agenda. Russo asked the Board to let her know which items are more of a priority for her to work on. This Item will be placed on the next agenda. Homework for the Board will be to work on the "Now, therefore, be it resolved" section. The Board went over 10 bullet points.

- 1. Evaluate repairing the connection to Grand Water and Sewer Service Agency (GWSSA) in order to reduce its winter groundwater pumping and manage our winter overflow.*** This was deemed a repair as there used to be a connection there between GWSSA and Moab City, but it was sealed off about six years ago when it was found to be leaking and that is why it would be a repair.
- 2. Amend commercial building codes to require buildings greater than 5,000 square feet to install greywater systems and require all buildings to have WaterSense fixtures and rain catchment systems.*** It was recommended that this bullet point be amended to read, "Amend building codes to require new buildings to install the opportunity for greywater systems and require all new buildings to have WaterSense fixtures."

Castle explained that hashing all of the bullet points out would take another year. She said that it must go through staff before it can go through the different associated departments leading up to the Planning Commission and then the City Council. It would be helpful to staff if the Board planned an entire meeting to go through the document point by point, providing their much needed expertise so that the Planning Commission can be fully informed regarding the benefits of the system, the potential policy implications both good and bad, and the potential budget implications both good and bad. Board Member Duncan will work on gaining some expertise on

greywater systems so that he can eventually provide a 15-minute presentation for the Planning Commission.

Vulnerability, Consequences, and Adaptation Planning Scenarios (VCAPS)

Workshop report:

Discussion: Hultquist stated that the report is now final as opposed to it being a draft.

Utility Rate Recommendations:

Discussion: Russo stated that she had told the Finance Director that she would get rates from other cities as a comparison. She said that Grand County had already changed their water rates. Public Works Director Antillon said that there are legal requirements that the City has to comply with on what they can include in the rates. He said that the City has an engineering firm that helps them determine where their rates should be and how they set them. This agenda item will be placed on next year's priority list along with secondary water systems.

Motion and vote: Board Member Hultquist moved to approve this document, with edits from the Board, for dissemination for the City Council. Board Member Lynch seconded the motion. The motion passed 4-0 with Board members Hultquist, Lynch, Dohrenwend and Perkins voting aye.

Sustainability Video-Water Conservation:

Discussion: Russo played a section of the video to the Board. The video can be found at <https://www.youtube.com/watch?v=-hAPisugHxE>

Community Conservation Challenge-Water Savings:

Discussion: Russo reported that they have given out about 390 efficiency kits and they are working on calculating the estimated water savings. She will report back on that at the next meeting during her staff report.

Water data and monitoring discussion prior to Groundwater Monitoring Plan meeting:

Discussion: Board Member Hultquist reported that they will have their normal MAWP meeting on Wednesday of next week. Mark Stillson will be facilitating a groundwater monitoring meeting following the MAWP meeting at the Grand Center from 3:00 PM to 5:00 PM on November 20th. Stillson and Hultquist agree that no one really knows if the City is depleting their aquifer or not and the only way that they are going to find out is if they do some adequate monitoring. At that meeting they will discuss a request for proposals (RFP) to develop a groundwater monitoring plan. Not a water quality plan but a quantity plan, although there will be some components of that. They will need to map out what water is coming from where. There will be discussion of funding and how they are going to pay for it. Hultquist would like for the City to have adequate representation at the meeting. Hultquist also reported that he has been monitoring the well at Swanny City Park and it is showing a downward trend.

Housekeeping: Dohrenwend reminded the Board to send any notes they may have taken at the September meeting to Allred so that she can flesh out the minutes. She asked Allred to email out a reminder and Hultquist asked that Allred include the agenda for that meeting in the email.

Adjournment: Dohrenwend adjourned the meeting at 3:52 PM.

CITY OF MOAB

WATER CONSERVATION AND DROUGHT MANAGEMENT BOARD

REGULAR MEETING SCHEDULE 2020

The City of Moab Water Conservation And Drought Management Board will hold Regular City Council Meetings at 2:00 PM on the seconded Wednesday of each month. All Regular Water Conservation And Drought Management Board Meetings will be held in the Moab City Council Chambers at 217 East Center Street, Moab, Utah. Meeting dates will be as follows:

Meeting Type	Meeting Date
Regular Meeting	January 8
Regular Meeting	February 12
Regular Meeting	March 11
Regular Meeting	April 8
Regular Meeting	May 13
Regular Meeting	June 10
Regular Meeting	July 8
Regular Meeting	August 12
Regular Meeting	September 9
Regular Meeting	October 14
Regular Meeting	November 11
Regular Meeting	December 9

/j/Sommar Johnson
City Recorder

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