

Moab Area Watershed Partnership

Meeting Minutes November 18, 2015
Grand Center, Moab

Stakeholders Present	Affiliation	Others
Kara Dohrenwend Ann Marie Aubry Jeff Adams Dave Erley Gerrish Willis Don Andrews Mike Allred Bob O'Brien Bob Davidson Dana Van Horn Heila Ershadi Zacheria Levine Roslynn Brian Orion Rogers Jeremy Lynch Elizabeth Tubbs Phillip Bowman Kirstin Peterson Jason Johnson Kyle Baily	Grand Conservation District BLM Terrasophia LLC Town of Castle Valley Canyonlands Watershed Council NRCS UT DWQ Moab Solutions USFS – Manti La Sal GWSSA Moab City Grand County USU Sustainability Grand County Health Dept. USU Sustainability Grand County Moab City Moab City UFFSL Moab City	Carrie Baily Citizen Ken Kolm Consultant

ACTIVITY	DISCUSSION	ACTION
Review Agenda and Introductions	Introductions were not made.	September minutes were approved and today's agenda was accepted.
2015 Water Year Monitoring Report: <ul style="list-style-type: none"> 2014 Mercury in Fish Summary of 2012-2013 UDWQ intensive data standard exceedances Summary of 2015 Coliform results Optical Brightener results Development of 2015 recommendations for Coliform sampling and	<p>Mercury in Fish Review: Arne presented the 2014 results for mercury in fish from Mill Creek below the Powerdam. The results were some of the highest recorded values collected in the State and all the exceeded the .3ug/kg standard significantly. These results were discussed last spring and the MAWP recommended that the State collect some samples directly above the Powerdam as the Power dam stream segment is essentially a fish trap. The State has agreed with the request but couldn't schedule if for last summer. They agreed to consider it for a site the summer of 2016.</p> <p>2012-2013 UDWQ intensive data: The intensive data collected during the most recent intensive indicated water quality improvement from previous intensive sampling. Arne presented tables showing that none of the sites sampled in the MAWP watershed during this intensive violated water quality standards more than 10% of the time for all constituents except temperature and E. coli. This data indicates that for all parameters other than temperature and E. coli the streams are supporting their beneficial use designations.</p>	<p>Arne will remind UDWQ fish monitoring personnel that we requested the sampling above the Powerdam.</p> <p>Arne will incorporate the data collected since 2012 into the watershed management plan as current data.</p> <p>Arne will continue the current sampling efforts of the Sampling Analysis Plan in the Watershed Management Plan with the exception of some added sampling at the spring</p>

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<p>possible improvements.</p> <ul style="list-style-type: none"> Summary of 2015 Specific Conductance/Total Dissolved Solids results <p>Development of 2015 recommendations for TDS sampling and possible improvements</p> <ul style="list-style-type: none"> Overview of pre and post 2012 data <p>Discussion of how we incorporate the new data into the Watershed Management Plan.</p> <ul style="list-style-type: none"> 2017-2018 UDWQ intensive efforts. <p>What recommendations do we want to make to UDWQ next year for the intensive sampling efforts they will perform in 2017-2018</p>	<p>Summary of 2015 Coliform results:</p> <p>Arne presented graphs of the individual site sampling results and compiled data for all sites. The data indicate that several sites do not exceed the water quality standard for swimming. The good news is that several of those sites are very popular swimming areas. The sites that meet the standard are:</p> <p>Mill Creek below the Powerdam Kens Lake Castle Creek at USFS Boundary Castle Creek at Castleton</p> <p>The other seven sites sampled for E. Coli exceed the geometric mean standard for E. Coli. Those sites are:</p> <p>Pack Creek at Spanish Trail Road Pack Creek and Pack Creek Campground Pack Creek above Mill Creek at 200 South Mill Creek at Mill Creek Drive Mill Creek above Pack Creek at U191 Mill Creek below the confluence with Pack Creek @ 500 W Castle Creek in the Town of Castle Valley Castle Creek at U128 xing.</p> <p>Arne also explained there are two standards for E Coli, one is for the geometric mean of all samples (126 E Coli/100 ml) and the other is the maximum for any one sample (409 E Coli/100 ml). Several of the sites had results where the geometric mean of all samples exceed the maximum for any one sample. Those sites were:</p> <p>Pack Creek at Pack Creek Campground Pack Creek ab Mill Creek at 200 S Mill Creek at Mill Creek Drive Mill Creek below confluence with Pack Creek at 500 W</p> <p>Optical Brightener Results:</p> <p>One of the recommendations from last year was to do an optical brightener sampling to determine if the waters are receiving effluent from leaking sewage pipes or septic systems. Arne performed that test this month and Mike collected the samples devices this morning. Mike made an effort to darken the room and show the qualitative results to the attendees. Indeed the samples did fluoresce under a black light indicating the streams are receiving effluent from human sources.</p> <p>Arne explained that if UDWQ and the Department of Health were motivated to act upon these results the stream segments exceeding E Coli standards could be listed as non-attainment for E. Coli and signage indicating the dangers of contact with these waters could be erected. Arne commented that he did not believe the MAWP partners wanted a sign on Main St in Moab requesting people avoid contact with these waters because of E coli levels. Currently there aren't any projects aimed at decreasing E coli levels in the watersheds. The group discussed projects that could help E coli levels as well as possibilities for</p>	<p>below the diversion in the Town of Castle Valley. Castle Valley has requested adding that location to coliform and optical brightener sampling.</p>
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	<p>determining the number of septic systems still being used in Spanish Valley.</p> <p>Summary of 2015 Specific Conductance/Total Dissolved Solids results:</p> <p>Arne presented graphs of compiled averages of samples for TDS taken in 2015. He informed the group that none of the samples exceeded standards for TDS.</p> <p>Overview of pre and post 2012 data:</p> <p>Arne presented graphs comparing pre 2012 results to post 2012 results. The graphs indicated that with the exception of E Coli and temperature, there has been significant improvement for several parameters that had been exceeding water quality standards. The attendees questioned the means of improvements but no substantial hypothesis was developed.</p> <p>Arne asked the group for ideas on how to incorporate the post 2012 results into the Watershed Management Plan. The group agreed all data should be included in the plan and separating the data into current (last ten years) and historic data was a good idea.</p> <p>Arne reminded the group that a year from now the MAWP will need to make recommendations on sampling locations for 2017-18 UDWQ intensive monitoring.</p>	
Continuous water temperature profiles	<p>Arne presented temperature profiles for the seven sites where temperature is being monitored continuously. This data does indicate even upstream locations occasionally exceed the cold water fisheries maximum temperature standard of 20 degrees C. Some downstream locations exceed the temperature standard almost 25% of the year. This data combined with flow data could be used to determine the possibilities for instream and riparian improvements to lower water temperatures.</p>	<p>Arne will continue to maintain and compile probes and temperature data.</p>
Continuous depth profiles	<p>Arne presented 6 months of water level data from a monitoring well in downtown Moab. Arne asked the attendees if they had seen groundwater levels change like this data does. Several attendees said they had and it wasn't unusual. None of the attendees could explain why groundwater levels would change so quickly. Arne asked the group if they wanted him to pursue another monitoring well in downtown Moab and the attendees believes it could be valuable data.</p> <p>Arne presented the depth data from one of the instream probes. It was similar to other instream data with stable flows near baseline that were spiked with flash flooding events. Arne explained compiling and converting this data to actual flows wasn't easy but would eventually have flow files for all the sites.</p>	<p>Arne will speak with Jeff of Moab City about installing a pressure transducer in a monitoring well in Swaney Park.</p> <p>Arne will continue to work on the pressure transducer depth files.</p>
Items not on the Agenda	<p>Section 2.8, 2.9, & 2.10</p>	<p>Arne put these items out as not on the agenda, using it as a place holder for future meetings.</p>
Adjourn	<p>The next meeting will be at 1:00 January 20 at the Grand Center</p>	<p>Adjournment</p>