

Grand Junction Regional Airport Authority

Agenda Item Summary

TOPIC:	Appeal the Proposed Total Maximum Daily Load Water Quality Standards Proposed by the Colorado Department of Public Health and Environment		
PURPOSE:	Information <input type="checkbox"/>	Guidance <input type="checkbox"/>	Decision <input checked="" type="checkbox"/>
RECOMMENDATION:	To formally join the community appeal, led by Mesa County, against new proposed Total Maximum Daily Load water quality standards proposed by the CDPHE for the Grand Valley.		
SUMMARY:	<p>As part of the federal Clean Water Act, Section 303(d), states are required to periodically submit to the EPA a list of waterbodies that are impaired. The Colorado Department of Public Health and Environment (CDPHE) Water Quality Control Division proposed regulations for the Grand Valley establishing Total Maximum Daily Loads (TMDLs) that will determine the maximum amount of a pollutant that a waterbody may receive and still maintain water quality standards.</p> <p>A draft of the proposed TMDLs was issued in April 2021 by the CDPHE. The City of Fruita, City of Grand Junction, Grand Valley Water Users Association and Mesa County responded to the proposed standards on April 30, 2021 expressing concerns about the timeline for implementation due to incomplete data and an inaccurate assignment of implementation responsibilities. A final TMDL was issued on August 10, 2021 that does not appear to have given much consideration to comments submitted, and will impact Mesa County permits as soon as 2022 without revision. The Final TMDL Assessment for Colorado River Tributaries in the Grand Valley (COLCLC13b), Mesa County, Colorado can be found at: https://cdphe.colorado.gov/tmdl-public-notice</p> <p>Based on assessments from the GJT engineering team (Mead & Hunt and Garver), we do not believe the proposed TMDLs and water quality regulations directly impact the Airport. However, Mesa County has requested the Airport Authority join its community petition for the appeal of the proposed TMDL for the Colorado River tributaries in the Grand Valley due to the significant impact it is expected to have on the community and economic development. Mesa County has received support from several private businesses, the Grand Junction Area Chamber of Commerce, irrigation districts, and home builder associations within the community that plan to sign the final petition.</p> <p>This is an action item on the September 1, 2021 Grand Junction City Council meeting and the Fruita City Council will consider it on September 7, 2021.</p>		
REVIEWED BY:	Executive Director and Legal Counsel		
FISCAL IMPACT:	At this time, no direct fiscal impact is anticipated		
ATTACHMENTS:	<ol style="list-style-type: none">1. City of Grand Junction Staff Report Regarding TMDL Appeal proposed for the September 1, 2021 Meeting2. Grand Valley Public Comments on Proposed TMDL – April 2021		
STAFF CONTACT:	Angela Padalecki apadalecki@gjairport.com 970- 852-1247		



Grand Junction City Council

Workshop Session

Item #4.d.

Meeting Date: September 1, 2021

Presented By: Trenton Prall, Public Works Director, Carrie Gudorf, Angie Fowler

Department: Public Works - Engineering

Submitted By: Trent Prall, Public Works Director

Information

SUBJECT:

A Resolution Authorizing the Mayor to Sign as a Petitioner to Mesa County's Notice of Appeal and Request for Adjudicatory Hearing in Response to the Colorado Water Quality Control Division's Publication of the Total Maximum Daily Load Assessment for Colorado River Tributaries in the Grand Valley

EXECUTIVE SUMMARY:

As part of the federal Clean Water Act, Section 303(d), states are required to periodically submit to the EPA a list of waterbodies that are impaired. The Colorado Department of Health and Environment Water Quality Control Division is proposing regulation for the Grand Valley that will establish Total Maximum Daily Loads (TMDLs) that will determine the maximum amount of a pollutant that a waterbody may receive and still maintain water quality standards. Grand Valley stakeholders, including Mesa County, City of Fruita, City of Grand Junction and the Grand Valley Water Users Association have concerns about the proposed regulations. Mesa County has requested the City to join its petition for the appeal of the proposed TMDL for the Colorado River tributaries in the Grand Valley.

BACKGROUND OR DETAILED INFORMATION:

As part of the federal Clean Water Act, Section 303(d), states are required to periodically submit to the EPA a list of waterbodies that are impaired. A waterbody is considered impaired when it does not meet a state's water quality standards. States develop water quality standards that (1) designate the beneficial uses a waterbody can support, (2) define the levels of certain pollutants and certain characteristics that a waterbody can contain while still supporting the designated beneficial uses, and (3) protect waterbodies that currently support their designated beneficial uses from becoming impaired.

The Clean Water Act and EPA regulations require that states develop total maximum daily loads (TMDLs) for impaired waters identified on the section 303(d) List. In Colorado, the agency responsible for developing the 303(d) List is the Water Quality Control Division at the Colorado Department of Public Health and Environment (CDPHE). The List is adopted by the Water Quality Control Commission as Regulation No. 93. A TMDL is used to determine the maximum amount of a pollutant that a waterbody may receive and still maintain water quality standards.

The waterbodies of concern are in the Lower Colorado River Basin, which includes all tributaries to the Colorado River. The Grand Valley watershed is a portion of the Lower Colorado River Basin which encompasses more than 30 stream/river segments and six lake/reservoir segments. Pollutants of concern are dissolved selenium, total recoverable iron, and E.coli bacteria. These pollutants can originate from an array of sources including point (e.g. wastewater treatment facilities) and nonpoint (e.g. crop field runoff) sources.

The Grand Valley stakeholders (City of Grand Junction, City of Fruita, Grand Valley Water Users Association (GVWUA) and Mesa County) understand the importance of the EPA's and CDPHE's role to restore and protect the quality of all Colorado waters at levels that fully support established water quality standards. TMDLs are one aspect of making progress toward those goals. Progress will also be made through the collective efforts of the Grand Valley stakeholders, representing both point sources and non-point sources; however, additional monitoring and analysis are needed to ensure the mitigation efforts will reduce the loadings.

The Draft TMDL came out in April 2021 and Grand Valley stakeholders (City of Grand Junction, City of Fruita, Grand Valley Water Users Association and Mesa County) as well as the Colorado Stone, Sand & Gravel Association provided comments regarding the draft TMDL document. The concerns included the source assessment, allocation of loads, and prioritization of implementation activities (TMDL allocations).

Source Assessment - the concerns include poor data or missing data, limited ability to identify and assess sources of pollutants, and a challenge to bridge the link between sources and the observed impairments.

Allocation of Loads - point sources (wasteload allocation), seven (7) permits identified, GVWUA inaccurate assignment of (non-standard MS4 permit) loadings to Indian Wash, Mesa County MS4 Permit loadings outside of the urbanized area. Nonpoint sources (load allocation), need to understand baseflow loadings (irrigation and non-irrigation seasons) and stormwater loadings, and need to understand background contributions of loadings.

TMDL allocations and implementation responsibilities - Delineation of the drainage areas isn't accurate and misrepresents implementation responsibilities for loadings outside the urbanized area; no data to understand the influence of stormwater loadings upstream of the TMDL watershed upper boundary versus the background loadings;

large loading reductions are required for the non-irrigation season. Most of the loadings are from agricultural return flows. The ability to control these loadings is limited; and E. coli loadings for Adobe and Leach Creeks need to be characterized to understand the sources.

A request was made to the Water Quality Control Division (WQCD) to delay the determination of the Final TMDL for three years to allow the following:

- Continue ongoing Grand Valley Watershed Plan and stakeholder process
- Initiate the Colorado Mesa University's E. coli research to inform better characterization of the source loadings
- United States Geological Survey's (USGS's) post-fire water quality monitoring plan to be developed and implemented. Specifically, initiate a monitoring study that will increase the number of streamflow and water quality gages to: collect paired water quality and streamflow measurements at the 9 "high" priority and 6 "medium" priority monitoring locations to aid analysis, specifically, strengthen the linkage between the pollutant sources and impairments and the contribution of stormwater loadings and baseload loadings during the distinct irrigation and non-irrigation seasons; update data to "current conditions" in areas and evaluate loadings across wet, dry, and average years and shifting land uses to understand the influence of climactic variations; and integrate the Orchard Mesa and Walter Walker Wildlife Areas as well as other backwater habitats that support the threatened and endangered fish in the Grand Valley.
- Provide annual reports and periodic updates to WQCD and EPA to document progress across these projects

The end result of the above effort would be development of a TMDL that would be more attainable than as currently drafted.

A follow-up discussion with WQCD staff was held on June 24, 2021 to further explain our concerns. CDPHE issued the final version of the TMDL on August 10, 2021. The report appears similar to the draft version without much consideration given to the comments submitted by the group, leaving limited options for the stakeholder group. Mesa County, on behalf of Fruita and Grand Junction, is working with the Grand Valley Water Users Association on an appeal based on the concerns listed above as well as some procedural issues that CDPHE did not follow. Mesa County is requesting that City of Grand Junction and City of Fruita join as Petitioners in the Notice of Request for Adjudicatory hearing. If the City chose not be part of the appeal petition, it could submit for party status in the rule-making hearing by filing 15 days prior to the hearing which is anticipated in late September or early October.

The Notice of Appeal and Request for Adjudicatory hearing is due by September 8. TMDL's were discussed at the Wednesday, August 25, joint workshop with City Council and Board of Mesa County Commissioners. City staff was directed to prepare formal action authorizing the mayor to sign as Petitioners to Mesa County's Notice of Appeal

Request.

The TMDL is not self-implementing (does not take immediate effect) but will be incorporated into a revised discharge permit which is anticipated in 2022 at which point it becomes "real" for the Grand Valley. Next steps will include developing a plan for the watershed affected by the TMDL followed by implementation in 2023.

FISCAL IMPACT:

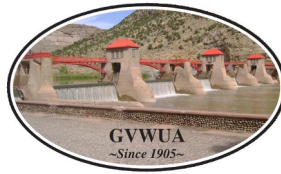
While the cost and other details of the appeal have not been determined, staff has included in the proposed 2022 budget an additional \$50,000 to the contract with Mesa County for stormwater quality services to cover costs associated with the appeal and/or implementation of TMDL mitigation measures.

SUGGESTED ACTION:

I move to (adopt/deny) Resolution No. 70-21, a resolution authorizing the Mayor to sign as a petitioner to Mesa County's Notice of Appeal and request for adjudicatory hearing in response to the Colorado Water Quality Control Division's publication of the Total Maximum Daily Load Assessment for Colorado River tributaries in the Grand Valley.

Attachments

1. Total Maximum Daily Load Assessment Final Report
2. Grand Valley Letter
3. Resolution



April 30, 2021
Tristan Acob
CDPHE
WQCD-WSP-B2
4300 Cherry Creek Drive South
Denver, Colorado 80246-1530
tristan.acob@state.co.us

RE: Grand Valley Public Comments on the Total Maximum Daily Load Assessment (TMDL)
– Colorado River tributaries in the Grand Valley (COLCLC13b), Mesa County, Colorado April
2021 Draft Version

Tristan,

Thank you for all your efforts and time in compiling the Draft Total Maximum Daily Load (TMDL) for the Colorado River tributaries in the Grand Valley (COLCLC13b), Mesa County, Colorado (April 2021). The Colorado Department of Public Health and Environment (CDPHE) – Water Quality Control Division (WQCD) (Division) and U.S. Environmental Protection Agency (EPA) staff listened to the stakeholders. Most importantly, you were willing to work cooperatively and delayed the TMDL schedule to allow additional water quality data collection to inform the process. This letter documents the primary concerns of the Grand Valley Water Users Association (GVWUA), the City of Grand Junction, Mesa County Stormwater Division, and the City of Fruita associated with the above-referenced Draft TMDL Assessment.

We understand the importance of the Division and EPA's roles to restore and protect the quality of all Colorado waters at levels that fully support established water quality standards. TMDLs are one aspect of making progress towards these goals. We also understand that progress will be made through the collective efforts of the Grand Valley stakeholders, representing both point sources and nonpoint sources; however, additional monitoring and analysis are needed to ensure the mitigation efforts will reduce the loadings.

As you are aware, in working on this TMDL, the Grand Valley is unique. It is characterized by a rich agricultural presence and semi-arid climate, requiring a non-traditional approach to understanding the hydrology and pollutant loadings throughout the area due to the historical irrigation practices. Although the Draft TMDL is highly technical, the area is complex, and the document falls short of depicting the hydrology and pollutant sources accurately. Hence, we respectfully request that you delay the issuance of the TMDL to allow the planned water quality monitoring efforts to characterize the water quality.

The Grand Valley stakeholders have also taken the initiative to understand better the impairments in the Grand Valley. They are updating the 2012 Selenium Watershed Management Plan Update for the Lower Gunnison River Basin and the Grand Valley, Colorado, as part of this effort. The Updated Watershed Plan will enhance the Grand Valley area with

information and develop a water quality monitoring strategy to understand the data gaps and pollutant loadings causing stream impairments. Information regarding the Lower Gunnison's lessons learned and successes in mitigating selenium loadings is also being considered for implementation in the Grand Valley area. Hence, we request your consideration in delaying this TMDL to keep this initiative moving forward and informing collaborative solutions rather than regulating permit holders that may or may not have the authority to control sources due to their unique function in the Grand Valley (i.e., some irrigation districts don't collect stormwater and only deliver irrigation water to lands and have no control of the water beyond the delivery structure, can't mitigate the water)

The Draft TMDL emphasizes the importance of the water quality restoration planning process in that it involves several steps, including:

- Watershed characterization,
- Target identification,
- Source assessment,
- Allocation of loads, and
- Prioritization of implementation activities.

Our primary concerns with the Draft TMDL are with the source assessment and allocation of loads, which then impact the prioritization of implementation activities steps. The following sections provide additional justification for these concerns.

Primary Concerns

This section summarizes our primary concerns associated with the Draft TMDL.

Source Assessment

The existing data sets used to determine the TMDLs are inadequate and limited in that they:

- Lack of continuous streamflow data on the tributaries
- Lack of paired water quality and streamflow data on the tributaries
- Lack of adequate characterization of stormwater data
- Are missing data to characterize the influence of stormwater-related loadings from the BLM lands upstream of the Government Highline Canal (GHC)

Therefore, the ability to identify and assess sources of the pollutants of concern and provide the link between sources and the observed impairments is therefore limited by the poor streamflow and water quality data.

The U.S. Geological Survey (USGS), in cooperation with the Grand Valley Drainage District (GVDD) and the Colorado Water Conservation Board (CWCB), conducted a study to 1) characterize concentrations, loads, and load reductions for *Escherichia coli* (*E. coli*), total recoverable iron, and dissolved selenium using existing data and 2) identified water-quality data

gaps to inform future monitoring strategies for the development of TMDLs (Thomas, 2020). The Grand Valley stakeholders initiated this effort as part of the Watershed Plan Update process.

Key findings from this work included:

- Overall lack of continuous streamflow data
- Total Recoverable Iron
 - None of the sampling sites had enough concurrent total recoverable iron and streamflow data to compute annual loads
- Dissolved Selenium
 - Analysis of 3 Colorado River mainstem sites show decreasing trends in concentration and load from 1980 – 2018
 - The downward trends at the mainstem sites could indicate that the tributary concentrations and loads might also be changing over time, however, there is a lack of paired flow and concentration data to be able to confirm this at this time

The USGS also conducted a loading analysis for selected constituents and tributaries to the Colorado River in the Grand Valley, western Colorado, using data from 1991 to 2018, to characterize concentrations, stream loading, and load reductions for *E. coli*, total recoverable iron, and dissolved selenium for stream segments on the State of Colorado 303(d) list of impaired waters. *E. coli*, total recoverable iron, and dissolved selenium concentrations, and streamflow data were compiled from the Water Quality Portal (WQP). The data tables include information on sites, data collection time periods, concentrations, computed loads, and regression model diagnostics. Dissolved selenium annual loads, percentage load reductions required to meet State regulatory standards, mean daily loads computed for irrigation and non-irrigation seasons, and regression model diagnostics and results are presented for sites where sufficient data were available. The USGS integrated this information into an interactive map tool¹ to support the visual representation of the data and future monitoring efforts (Gidley and Miller, 2020).

Allocation of Loads

The Draft TMDL describes the allocation of pollutant loads by defining point sources and nonpoint sources and the relative contribution of each to impairments.

Grand Valley Point Sources (Wasteload Allocations)

In general dischargers covered by individual Colorado Discharge Permitting System (CDPS) as well as stormwater dischargers covered by general CDPS permits are point sources. The TMDL implementation will occur through CDPS permits for point sources and through Best Management Practice (BMP) implementation from various remediation efforts led by local stakeholders. There are seven facilities that have permits in the Grand Valley watershed and discharge directly to the impaired tributaries (listed in Table 7).

¹ [Analysis of Escherichia coli, total recoverable iron, and dissolved selenium concentrations and loads for selected 303\(d\) listed segments in the Grand Valley, western Colorado, 1991–2018 \(ver. 2.0, August 2020\) - ScienceBase-Catalog](#)

Grand Valley Water Users Association MS4

The GVVUA has a non-standard Municipal Separate Storm Sewer System (MS4) permit and is included in the WLA of the TMDLs for Leach Creek and Indian Wash (note Table 8 needs to be revised to reflect Leach Creek instead of Persigo Wash). The operations of the GVVUA will not allow them to implement control measures and management practices to directly influence the loading reductions. It should be noted that the GVVUA doesn't directly discharge to these impaired tributaries and delivers water to lands that irrigate with water diverted from the Colorado River and conveyed through the GHC. Once the water is diverted from the GHC the GVVUA doesn't have the ability to control or mitigate the use of the water nor the agricultural runoff from the irrigated lands or return flows. In addition, the GVVUA doesn't receive nor discharge stormwater.

The Clean Water Act definition for point sources does not include agriculture stormwater discharges and return flow from irrigated agriculture.

Mesa County MS4

The Mesa County MS4 Permit is responsible for stormwater discharges within the Mesa County Urbanized Area and therefore only has the ability to implement control strategies and management practices within this area.

Grand Valley Nonpoint Sources (Load Allocations)

In general discharge from irrigation and fertilization practices, in conjunction with the natural geological features of the area are nonpoint sources. TMDL implementation will also occur through volunteer efforts led by local stakeholders and watershed groups to remediate nonpoint source contributions.

The Draft TMDL also recognizes the contributions from unregulated stormwater, during wet weather (rainfall and snowfall) events outside the Urbanized (regulated) Area. It is important to characterize the unregulated stormwater influence of the lands upstream from the upper TMDL watershed boundary, above the GHC, to distinguish between baseflow and stormwater loading contributions to the impairments in the Grand Valley.

TMDL Allocations and Implementation Responsibilities

We have the following overall concerns with the Wasteload and Load Allocations for the TMDL:

- Delineation of the drainage areas isn't accurate and mis-represents implementation responsibilities for loadings outside the urbanized area (MS4 implementation for WLAs)
- No data to understand the influence of stormwater loadings upstream of the TMDL watershed upper boundary versus the background loadings
- Large loading reductions are required for the non-irrigation season. Most of the loadings are from agricultural return flows. The ability to control these loadings is limited.
- *E. coli* loadings for Adobe and Leach Creeks need to be characterized to understand the sources.

Grand Valley Drainage Areas and Hydrology

The TMDL drainage areas for each impaired tributary were calculated using Hydrologic Unit Code (HUC) 12 watershed delineations or a combination of HUC12 and drainage areas

determined by local Mesa County maps. The upper boundary is the Government Highline Canal (GHC) which acts as a boundary between the Bureau of Land Management (BLM) lands and the urbanized and agricultural land uses of the Grand Valley. We don't believe the drainage areas are accurately delineated and therefore don't depict the pollutant loadings and TMDL allocations correctly.

The following explanation of GVWUA's water delivery near Indian Wash is just one example of the inaccurate delineation of the sources of impairment and misrepresentation of them as a WLA.

Figure 1 shows the diversion of water from the GHC and flowpaths. Note there is a ridge to the east of the pink lateral (running north and south, immediately after the diversion) that keeps the water to the west, not discharging to Indian Wash.

- Red circles represent points of diversion off the GHC
- The yellow circles represent the location where Indian Wash goes under the GHC (no comingling of GHC and Indian Wash)
- Water is applied to the farm fields, which slope to the west/southwest or conveyed in the lateral represented by the pink and red lines that deliver water to the southwest (red arrows).
- This water ultimately travels to the west, where it is used to irrigate lands and ultimately returns to the Grand Valley Irrigation Canal (red arrows).

In addition, MS4's or "urbanized areas" will have multiple sources of pollution. Not just storm runoff. Deep percolation from irrigated areas (parks, lawns, hobby farms), irrigation delivery systems, septic systems, leaky domestic pipes, and even retention basins all contribute to the overall complexity of pollution sources and quantities in "urban areas". These are all nonpoint sources. These complexities would affect the allocation of pollutant loads from this land use type.

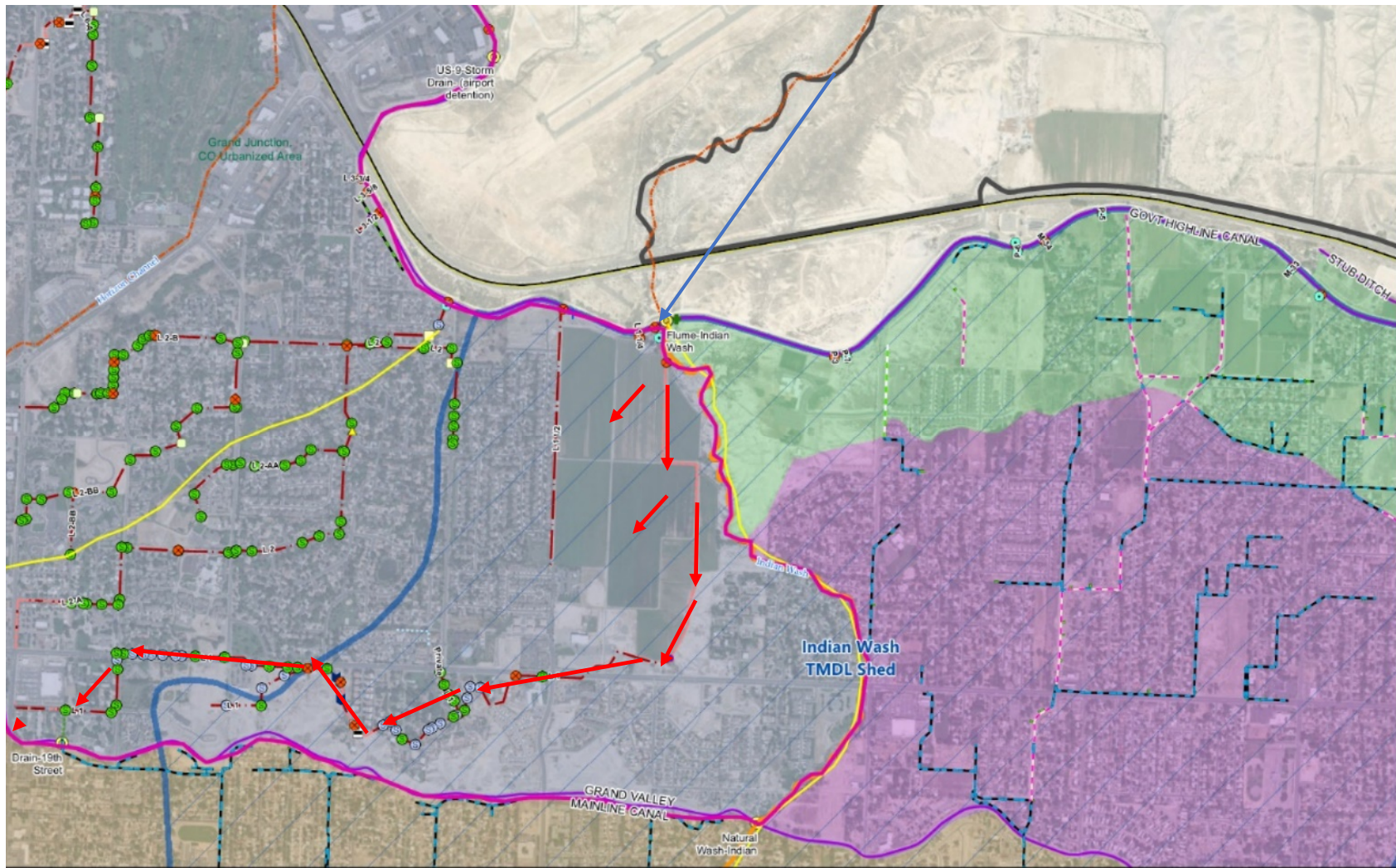


Figure 1. Indian Wash Example for GVWUA.

Stormwater Loadings from Upstream of TMDL Watersheds

The tributaries and natural washes that flow into the Grand Valley from above the upper TMDL watershed boundary at the GHC are ephemeral in nature and potentially contribute to the stormwater loads during precipitation events. The characterization of stormwater events is not technically supported with the existing water quality and streamflow datasets and needs further monitoring and analysis.

Control of Non-Irrigation Season Loadings

The pollutant loadings in the non-irrigation season (November – March) are primarily due to the conveyance of agricultural return flows and seepage of ground water into the natural washes, tributaries, and drains. In general, these loadings should be accounted for in the Load Allocation portion of the TMDL. The average precipitation during these months is less than 1 inch, therefore most likely reducing the pollutant loadings from the Wasteload Allocation (WLA) categories as there is little to no stormwater runoff.

E. coli Loadings

The Draft TMDL lists the major *E. coli* sources of impairment for Adobe and Leach Creeks as runoff from pastures and small farms, wildlife and domestic pets, septic system failures, and urban stormwater runoff and that based upon the available *E. coli* and flow data, it was determined that the observed flows do not correlate to the observed magnitude of the *E. coli* concentration, therefore, the source assessment was completed over an entire year. The GVVUA and Mesa County Stormwater Division are identified as having “pertinent discharge” (Table 8) contributing to *E. coli* loadings.

The GVVUA and Mesa County Stormwater Division’s MS4 Permits apply to those areas within the Urbanized Area and most of the potential *E. coli* sources are outside the Urbanized Area, hence, limiting the opportunity for them to control the sources.

The Mesa County Stormwater Division is working with the Colorado Mesa University and Mesa County to characterize the specificity of the *E. coli* loadings (humans, cows, horses, dogs, and ducks) using the ddPCR method. The objective for this work is to provide Mesa County with a tool to better understand the sources of fecal contaminations in hopes to mitigate them.

Requests and Recommendations

Overall, we are requesting that you ***delay the determination of the Final TMDL for three years to allow the on-going Grand Valley Watershed Plan and Stakeholder process to continue, USGS’ post-fire water quality monitoring plan, and the Colorado Mesa University’s E. coli research to inform better characterization of the source loadings.*** Specifically, the implementation of the water quality monitoring study that will increase the number of streamflow and water quality gages to:

- Collect paired water-quality and streamflow measurements at the 9 ‘high’ priority and 6 ‘medium’ priority monitoring locations (see USGS proposed future monitoring discussion above) to aid analysis, specifically, strengthen the linkage between the pollutant sources

and impairments and the contribution of stormwater loadings and baseload loadings during the distinct irrigation and non-irrigation seasons,

- Update data to "current conditions" in areas with probable trends and evaluate loadings across wet, dry, and average years and shifting land uses to understand the influence of climactic variations, and
- Integrate the Orchard Mesa and Walter Walker Wildlife Areas as well as other backwater habitats that support the Threatened and Endangered fish in the Grand Valley

We commit to providing annual reports and periodic updates to you and EPA to document progress across these projects.

Additional Minor Comments

The following list identifies minor comments and suggested edits.

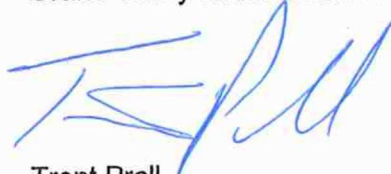
- Page 22 - Add a footnote for Leach Creek in Table 1. There is a footnote under the table but no cross-reference within the table.
- Section 3.1 (Project Setting) recognizes several municipalities, special districts such as the GVDD and Mesa County Stormwater Division, and GVWUA. There are other irrigation districts within the Grand Valley that should be included in the Project Setting of the TMDL.
- Table 8 mentions Persigo Wash for the GVWUA. Should this be Leach Creek?

We appreciate your time reviewing our comments and want to be clear that the request for a delay in the implementation of the TMDL is not intended to avoid responsibility, but set realistic goals based upon sound science and data with on-going and upcoming projects. Please don't hesitate to reach out to Angie Fowler at angief@sgm-inc.com or 970-384-9027 if you have any questions.

Truly yours,



Mark Harris
General Manager
Grand Valley Water Users Association



Trent Prall
Public Works Director
City of Grand Junction

DocuSigned by:

Scott Mai

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Scott Mai
Deputy Public Works Director
Mesa County



Kimberly Bullen
Public Works Director
City of Fruita

cc: Tammy Allen, CDPHE-WQCD (tamara.allen@state.co.us)
Sarah Wheeler, CDPHE-WQCD (sarah.wheeler@state.co.us)
Shera Reems, EPA Region 8 (reems.shera@epa.gov)
Jon Markovich, EPA Region 8 (markovich.jonathan@epa.gov)

Citations

Gidley, R.G., and Miller, L.D., 2020, Analysis of Escherichia coli, total recoverable iron, and dissolved selenium concentrations and loads for selected 303(d) listed segments in the Grand Valley, western Colorado, 1991–2018 (ver. 2.0, August 2020): U.S. Geological Survey data release, <https://doi.org/10.5066/P9P6WI44>.

Thomas, J.C., 2020, Analysis of Escherichia coli, total recoverable iron, and dissolved selenium concentrations and loads for 303(d) listed segments in the Grand Valley, Colorado, 1991-2018: U.S. Geological Survey data release, <https://doi.org/10.5066/P9WYN7DK>.