

## Memorandum


**To:** Nine Mile Creek Watershed District Board of Managers  
**From:** Janna Kieffer and Michael McKinney  
**Subject:** Phase 2 Atlas 14 Flood Risk and Resiliency- Project Schedule  
**Date:** February 10, 2021  
**Project:** 23271819.01  
**c:** Randy Anhorn, Nine Mile Creek Watershed District Administrator


Attached is a schedule for Phase 2 of the Atlas 14 Flood Risk and Resiliency project. Following discussion at the January 20, 2021 board meeting, we reviewed the project schedule in detail and were able to compress the schedule somewhat. The revised schedule has project completion in January 2021, versus February 2021 as shown in the January 13, 2021 scope of work. We have also identified several places within the schedule where there is potential for the schedule to be shortened, depending on preliminary results and level of effort needed (shown as light-gray hatched areas in the attached schedule table). While many of the project tasks must be completed linearly, the schedule identifies some tasks that can be conducted concurrently. For example, while model calibration (Task 2) should occur after model modifications are made to "capture" runoff for the mid-century precipitation event (Task 1A), processing of the data for calibration has been initiated and can be completed prior to completion of Task 1A/1B to help compress the project schedule.

It is our understanding that the Board would like to move forward with Phase 3 of the Atlas 14 Flood Risk and Resiliency project as soon as possible. We've added a line item at the bottom of the schedule to show that Phase 3 scoping can start mid-year, and project implementation could potentially begin before the end of the year (after Task 4 is completed).

The attached schedule also includes tentative timing of meetings with the TAC and Board throughout the project. A summary of tentative discussion topics is also included below the schedule.

		Jan 2021	Feb 2021		March 2021		April 2021		May 2021		June 2021		July 2021		August 2021		Sept 2021		Oct 2021		Nov 2021		Dec 2021		Jan 2022	
Task/Task Description		wk 4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4	wk 1-2	wk 3-4
	Internal project kickoff																									
1A/1B	Model modifications to "capture" runoff for mid-century precipitation event, Additional QAQC.				TAC																					
2	Data Processing for Model Calibration				TAC																					
2	Model Calibration																									
1C	Flood Mapping + Additional model QAQC																									
1D	Preliminary Identification of Flood Prone Areas, Structures, and Roadways																									
3	Stakeholder Review of Model Results and Flood Inundation Mapping																									
	Finalize model results and mapping (as needed based on stakeholder review)																									
4	Quantify potential flood damage costs																									
5	Risk analysis for potential pipe failures or clogging at creek crossings																									
6	Develop framework for evaluating potential flood mitigation				TAC																					
8	Documentation memo/report																									
	Phase 3 Scoping/Discussions*																									

 = task underway

 = potential for shortened schedule, depending on preliminary results

TAC = tentative Technical Advisory Committee (TAC) meeting

Board = tentative presentation to NMCWD Board

\* not included in approved Phase 2 scope of work.

**Tentative description of TAC/Board meetings:**

- TAC 1            March            Kickoff TAC meeting to discuss the following:**
  - Overview of project
  - Initial steps related to volume capture and calibration
  - Framework for evaluating flood mitigation
- TAC 2            May                Progress update TAC meeting to discuss the following:**
  - Volume capture / calibration progress
  - Framework for evaluating flood mitigation
  - Kickoff Phase 3 scoping.
- TAC 3 / Board 1    August            Post calibration and preliminary mapping meeting to discuss the following**
  - Present calibration results and preliminary flood mapping
  - Delivery preliminary flood mapping for stakeholder review.
  - Discuss risk analysis / selection of crossing for modeling analysis.
  - Phase 3 scoping discussion.
- Board 2            October            Board meeting to discuss the following:**
  - Potential flood damage cost analysis
  - Finalize Phase 3 scoping
- TAC 4 / Board 3    November        Final Phase 2 meeting to discuss the following:**
  - Potential flood damage cost analysis
  - Risk analysis related to pipe failures
  - Framework for evaluating flood mitigation
  - Final Phase 3 scoping