

# METROPOLITAN SEWER DISTRICT OF GREATER CINCINNATI

**Project ID 10142910**  
**Ludlow Run Sustainable Source Control**  
**Contract 95x12762**

Progress Report for  
Professional Services provided April 3, 2023 through April 30, 2023

Arcadis U.S., Inc.

---

At the request of the Metropolitan Sewer District of Greater Cincinnati, Arcadis worked on the following items as summarized below.

#### Task 1 Project Administration - Planning

- Performed project administration and resource management; communicated updates to MSDGC project manager.
- Updated Schedule

#### Task 2 Data Review and Collection

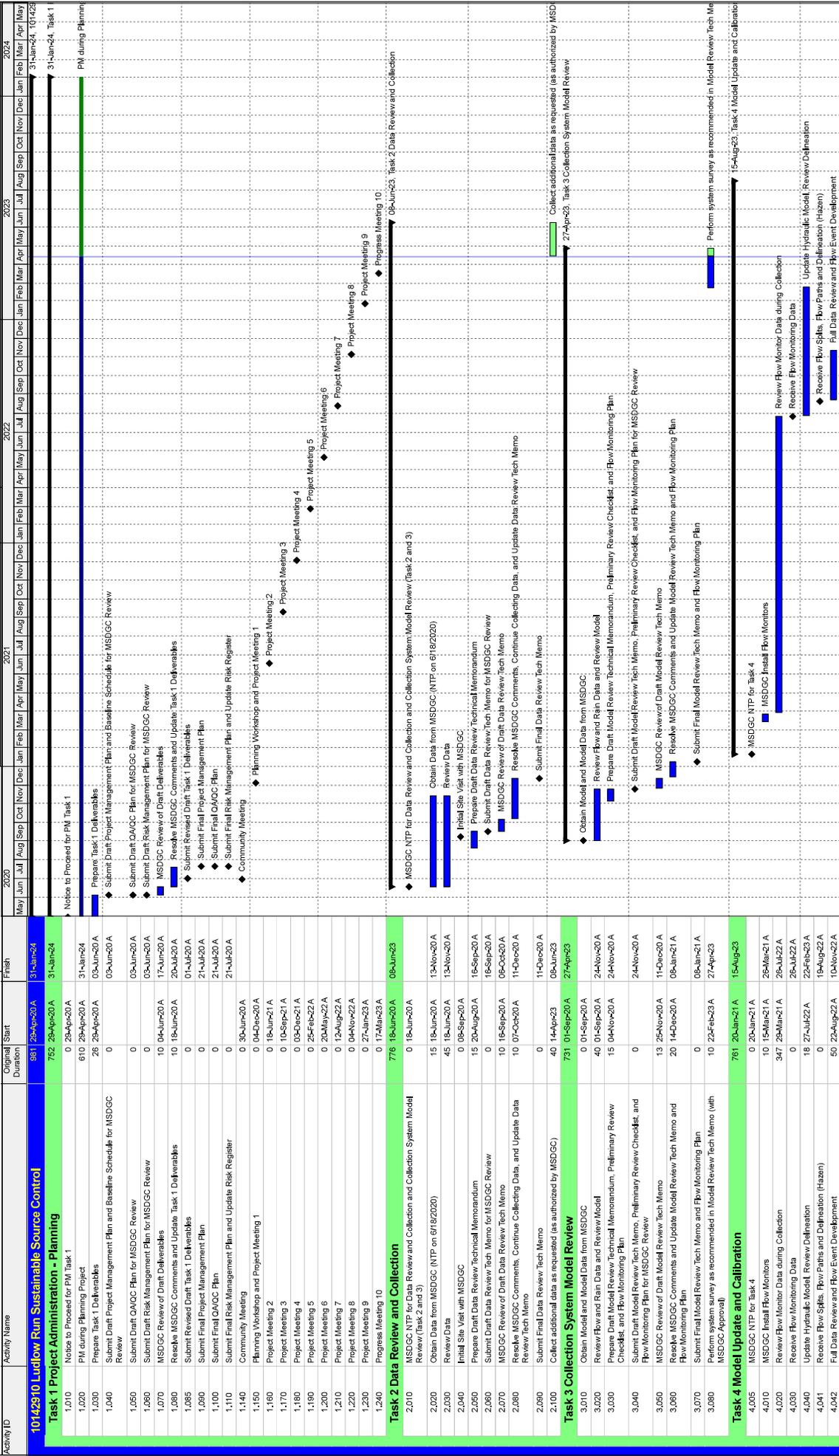
- 

#### Task 3 Collection System Model Review

- 

#### Task 4 Model Update and Calibration

- Updates and edits of delineation from Hazen and review of impervious areas and update of impervious shapefile
- Internal Modeling call to pass model after completion of delineation edits to calibration of horton parameters, runoff parameters and RTK. More than half of the physical subcatchments parameters (%impervious, flow length, borders) provided by Hazen were edited in one form or another, including the fine tuning of DCIA (directly connected impervious area).



MSDGC NTP for Data Review and Collection and Collection System Model Review (Task 2 and 3)

Obtain Data from MSDGC (NTP on 6/18/2020)

Review Data

Initial Site Visit with MSDGC

Prepare Draft Data Review Technical Memorandum

Submit Draft Data Review Tech Memo for MSDGC Review

MSDGC Review of Draft Data Review Tech Memo

Resolve MSDGC Comments, Continue Collecting Data, and Update Data Review Tech Memo

Submit Final Data Review Tech Memo

Collect additional data as requested (as authorized by MSDGC)

MSDGC NTP for Task 3

Obtain Model and Model Data from MSDGC

Review Raw and Rain Data and Review Model

Prepare Draft Model Review Technical Memorandum, Preliminary Review Checklist, and Flow Monitoring Plan

Submit Draft Model Review Tech Memo, Preliminary Review Checklist, and Flow Monitoring Plan for MSDGC Review

MSDGC Review of Draft Model Review Tech Memo

Resolve MSDGC Comments and Update Model Review Tech Memo and Flow Monitoring Plan

Submit Final Model Review Tech Memo and Flow Monitoring Plan

Perform system survey as recommended in Model Review Tech Memo (with MSDGC Approval)

MSDGC NTP for Task 4

MSDGC Install Flow Monitors

Review Flow Monitor Data during Collection

Receive Flow Monitoring Data

Update Hydraulic Model, Review Definition

Receive Flow Stiles, Flow Paths and Definition (Hazen)

Full Data Review and Flow Event Development

