



October 5, 2016

Matthew Lindsay  
Manager, Environmental Planning  
MVRPC  
One South Main Street, Suite 260  
Dayton, OH 45402

**RE: Facility Planning Area Modification Request (City of Dayton)**

Mr. Lindsay:

Please accept this letter as a follow-up to both the letter from this office dated August 1, 2016 and the meeting held at the Dayton International Airport (DIA) on September 19, 2016 regarding the change in Facility Planning Area. Each of the additional items requested are explained/provided below:

- ✓ A. See attached map that is rendered as an ESRI GIS dataset projected in Ohio State Plane South, Feet, NAD83. Electronic file/shape files are also provided.
- B. Twenty Year Population projections from most recent census data are not applicable as the change request is for the Dayton International Airport and potential commercial and/or industrial developments or those previously identified through the JEDD Areas. Current mapping obtained from MVRPC identifies population trends and we have integrated this information into this modification request. In addition, have provided information in part D which identifies the Population Equivalent that may be served by the Dayton Water Reclamation Facility.
- C. Currently, the DIA is supplied water service by the City of Dayton. It should be noted that existing sanitary sewer service is provided by both City of Dayton and Tri-Cities via existing infrastructure. The current FPA identifies that the entire DIA is within the Tri-Cities FPA (which is not correct).
- D. Table #1 indicates all pertinent information requested in Part D. The population projections used within Table #1 are the Population Equivalent served which is based on loadings received at the WRF. These loadings are based on Influent cBOD and Suspended Solids calculations that are commonly used in wastewater treatment. Actual population projections (based on current census data) was not used since the areas in question are not residential areas but more commercial / industrial uses and are more applicable to this FPA change request.
- E. Table #1 also provides information requested. Starting on Page #3, the current NPDES Permit Limitations are listed. It should be noted that monitoring sites are not listed since there are no limitations required at these sites.
- F. The City of Dayton Water Reclamation facility has adequate capacity to successfully treat all commercial or industrial growth resulting from the FPA boundary modification. In Table #1, on Page #2, the reserve capacity of the WRF is shown. The reserve hydraulic capacity of the WRF assures adequate handling of an additional population of 260,110.

**TABLE #1**

	2015*	2016**	Reserve Capacity
Current Plant Average Flows	45.989 MGD	47.226 MGD	56%
Current Plant Capacity	72 MGD	72 MGD	-
Estimates of Future Flow	72 MGD	72 MGD	-
Population Equivalent "CBOD"	901,933 capita	Peak 1,417,673 capita	-
Population Equivalent "Suspended Solids"	499,079 capita	Peak 811,372 capita	-
Peak Hourly Flow	150 MGD	150 MGD	50%

\* Annual Daily Average

\*\* Daily Average as of June 1, 2016

- G. The WRF NPDES Permit requiring E. Coli limitations will aid in identifying the degree of possible pollution within the Lower Great Miami River (LGMR). Currently the WRF is performing both E. Coli and Fecal Coliform analysis for comparative purposes. The City of Dayton WRF has been very proactive in protecting the LGMR by being a part of the Lower Great Miami River Coalition. The Lower Great Miami River Coalition is committed to protecting the LGMR by assuring that all limitations included within a NPDES permit has been derived from good sound science.
- H. The existing FPA identifies that wastewater from the DIA is currently discharged to the Tri-Cities Wastewater Treatment Plan. This current designation is not necessarily accurate as a portion of the DIA wastewater is discharged to the Dayton Water Reclamation Facility. It is Dayton's plan to utilize this existing connection and/or upgrade as necessary to accommodate increased flow. It should be noted that Dayton is the Water provider within this area and the DIA is also incorporated within City of Dayton limits.
- I. The only jurisdiction currently involved other than Dayton is Tri-Cities. The DIA has discussed existing sewer improvements at the DIA with Tri-Cities.

Sincerely,



Michael Powell, Interim Director  
Department of Water

- c: Tammi L. Clements, Deputy City Manager  
Terry Slaybaugh, Director of Aviation  
Aaron Zonin, PE Acting Deputy Director of Water  
Chris Clark, Manager Division of Water Reclamation

Enclosures

**ENCLOSURE 1**

**EXISTING FPA MAP**



FREDERICK GARLAND  
 KESSLER FREDERICK

GINGHAMSBURG FREDERICK



**MIAMI VALLEY**  
 Regional Planning Commission  
 Shaping Our Region's Future Together

25A

GINGHAMSBURG

GINGHAMSBURG FREDERICK

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

TPP COMSEVILLE TR  
 TPP CANAL

LIGHTNER

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

FROST

OLD SPRINGFIELD

LIGHTNER

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

OLD SPRINGFIELD

UNION

FREDERICK GARLAND  
 KESSLER FREDERICK

SULLIVAN

OLD CANAL

OLD SPRINGFIELD

LIGHTNER

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

TRIP-CITIES

UNION

FREDERICK GARLAND  
 KESSLER FREDERICK

DOG LEG

UNION

FREDERICK GARLAND  
 KESSLER FREDERICK

NORTHWOODS

LIGHTNER

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

RAMP

LIGHTNER

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

CASSEL

RAMP

LIGHTNER

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

RAMP

LIGHTNER

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

RAMP

LIGHTNER

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

DAYTON INTL AIRPORT ACCESS

RAMP

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

RAMP

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

HEKKE

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

DAYTON

UNION

FREDERICK GARLAND  
 KESSLER FREDERICK

DOG LEG

UNION

FREDERICK GARLAND  
 KESSLER FREDERICK

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

DIXIE

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

MEEKER

UNION

FREDERICK GARLAND  
 KESSLER FREDERICK

STONEQUARRY

PETERS

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

2 Miles

1

0.5

0

MONTGOMERY COUNTY LINE

FREDERICK GARLAND  
 KESSLER FREDERICK

ENGLEWOOD

**Facility Planning Areas**

DAYTON

ENGLEWOOD

TRI-CITIES

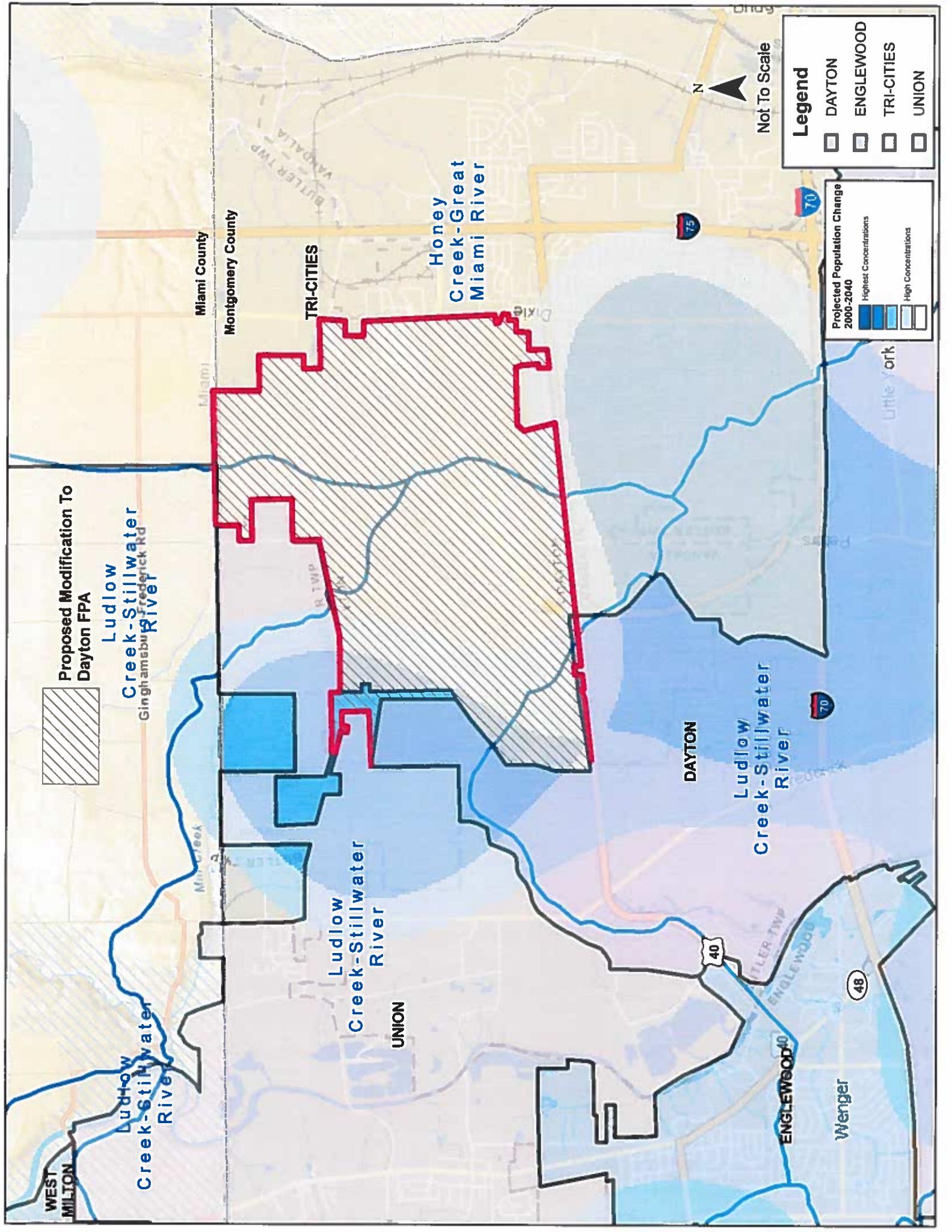
UNION

Rivers, Streams

Roads, Streets



**ENCLOSURE 2**  
**PROPOSED FPA MODIFICATIONS**



Not To Scale


**Legend**

-  DAYTON
-  ENGLEWOOD
-  TRI-CITIES
-  UNION

**Projected Population Change 2000-2040**

-  Highest Concentrations
-  High Concentrations
-  High Concentrations
-  High Concentrations

**Proposed Modification To Dayton FPA**



Ludlow Creek-Stillwater River  
Gingraham/Fredrick Rd

Miami County

Montgomery County

TRI-CITIES

Honey Creek-Great Miami River

DAYTON

Ludlow Creek-Stillwater River

Ludlow Creek-Stillwater River

UNION

Ludlow Creek-Stillwater River

WEST MILTON

Wenger

ENGLEWOOD

40

48

70

75

70

ANDALIA BUTLER TWP

R TWP

TYLER TWP

Little York