

Oak Creek Watershed Restoration Plan GIS Files

The geodatabases linked here contain geographical data presented in the Oak Creek watershed restoration plan (SEWRPC Community Assistance Planning Report No. 330). The three **Oak Creek Watershed Restoration Plan Instream Survey Data** geodatabases contains physical features of the stream system and other features identified during the field surveys of the mainstem of Oak Creek, the North Branch of Oak Creek, and the Mitchell Field Drainage Ditch in 2016 and 2017. The geodatabase file **OakCreekWRPMapFiles.gdb** contains map feature layers for some of the maps presented in the plan report.

Oak Creek Watershed Restoration Plan Instream Survey Data (3 Geodatabases)

Many of the features in these 3 geodatabases have photos attached to the point or line feature. To view the photos, use the "Identify" tool to click on the feature in ESRI ArcGIS and select the "Attachments" drop-down in the Identify Window.

OakCreekWRP_InstreamSurveyData_1of3.gdb

- CrossSection_append
 - Point feature indicating locations of instream habitat cross sections surveys (see Appendix F for description of attributes included).
- Pool_append
 - Point feature indicating locations of observed pool habitat areas within the surveyed streams.
- Riffle_append
 - Point feature indicating locations of observed riffle habitat areas within the surveyed streams.

OakCreekWRP_InstreamSurveyData_2of3.gdb

- BankErosion_append
 - Line feature indicating observed areas of streambank erosion.
- StormwaterOutfall_append
 - Point feature indicating locations of observed outfalls along surveyed streams.
- StreamCrossing_append
 - Point feature indicating locations of culverts, bridges, weirs, dams, or other observed stream crossings along surveyed streams.

OakCreekWRP_InstreamSurveyData_3of3.gdb

- PhotoPoint_append
 - Point feature indicating points of interest during the instream surveys.
- SurveyPoint_append
 - Point feature indicating various points of interest observed along surveyed streams. Examples of items in this file include locations of large trash items, woody debris jams, springs or groundwater discharge, drain tiles, beaver dams, and observed mussels among other features.

OakCreekWRPMapFiles.gdb

Map layers in this geodatabase include selected critical features that are shown on maps throughout the Oak Creek watershed restoration plan.

- AssessmentAreas
 - Land area boundaries used to assess various conditions within the watershed.
- CivilDivisions_OakCreekWtshd
 - City boundaries within the watershed.
- DebrisJams_Passagelmpediment
 - Locations of large woody debris jams that were determined to have the potential to impede aquatic organism passage.
- EnvironmentalCorridors_2015
 - Designated Primary and Secondary Environmental Corridors and Isolated Natural Resource Areas within the Oak Creek watershed.
- ExistingAndRecommendedWQMonitoringStations
 - Locations where water quality data is currently being collected and locations where this plan recommends the establishment of new water quality monitoring stations.
- ExistingRiparianBuffers
 - Land areas that exhibit characteristics necessary to provide functions of riparian buffers, based on 2015 orthophotograph analysis.
- FarmedWetlands
 - Areas that have wetland soil characteristics but that are under some form of cultivation, as determined by the SEWRPC 2015 Land Use Inventory.
- GroundwaterRechargePotential
 - A ranking of land areas within the Oak Creek watershed assessing the ability of precipitation and runoff to be infiltrated to groundwater aquifers. These areas were determined by a model analysis developed in SEWRPC Technical Report No. 47 "Groundwater Recharge in Southeastern Wisconsin Estimated by a GIS-Based Water-Balance Model." Rankings are indicated in the "GRIDCODE" field (1 = Low, 2 = Moderate, 3 = High, 4= Very High, and 5 = Undefined or groundwater discharge areas).
- HydroLines_2015
 - Stream lines, waterbody outlines, and watershed boundary for the Oak Creek watershed.
- LandUse_2015
 - Categories of land use based on SEWRPC's 2015 Land Use Inventory.
- LandUse_FuturePlanned
 - Categories of planned land use based on individual community comprehensive plans.
- Outfalls
 - An inventory of all known outfalls within the watershed as reported in Appendix E. The inventory includes outfalls observed during instream surveys conducted by Commission Staff, outfalls reported by communities, and outfalls included in the City of Racine Public Health Department study described in Chapter 4 of this watershed restoration plan.
- PotentialChannelRestoration
 - Stream reaches recommended for either two-stage channel restoration, restore hydrologic connections between streams and wetlands, or reaches to consider regenerative stormwater conveyance retrofits.
- PotentialFloodplainConnectionProjectAreas

- Land areas to consider projects that re-establish a functional floodplain, restore wetlands, and re-establish hydrologic connections between streams and wetland complexes.
- PotentiallyRestorableWetlands
 - Areas determined by the Wisconsin Department of Natural Resources to potentially possess characteristics necessary to support wetlands.
- PotentialRiparianBufferAreas
 - Areas that do not currently exhibit the natural/undisturbed vegetative cover to be considered riparian buffer, but also are not yet developed in urban uses.
- PrimaryStreamlines
 - Stream line geometry for Oak Creek, North Branch Oak Creek, and the Mitchell Filed Drainage Ditch.
- RecommendedProjectsFINAL
 - Locations of specific projects recommended throughout the watershed as reported in Table 6.1.
- StreamCrossingPassageAssessment
 - Locations of culverts, bridges, weirs, dams, or other observed stream crossings along surveyed streams and their assessment for the ability of aquatic organisms to freely move upstream and downstream of the structure.
- Subwatersheds_OakCreek
 - Subwatershed boundaries that make up the Oak Creek watershed including the Lower, Middle, and Upper Oak Creek subwatersheds; the North Branch Oak Creek subwatershed; and the Mitchell Field Drainage Ditch subwatershed.
- VulnerableExistingAndPotentialRiparianBuffers
 - An overlay of existing and potential riparian buffer areas that were determined not to be protected from being developed in urban uses either because they are not publicly owned or do not fall into land use categories that might be protected from development through some sort of regulations.
- WatershedBoundary_OakCreek
 - Area of land that drains to Oak Creek.