

**SUMMARY NOTES OF THE NOVEMBER 14, 2018 MEETING OF THE
OAK CREEK WATERSHED RESTORATION PLAN ADVISORY GROUP**

INTRODUCTION

The November 14, 2018 meeting of the Oak Creek Watershed Restoration Plan Advisory Group was convened at the South Milwaukee City Administration building at 9:05 a.m. The meeting was called to order by Laura Herrick, Chief Environmental Engineer, Southeastern Wisconsin Regional Planning Commission (SEWRPC). South Milwaukee Mayor Eric Brooks provided a brief welcome at the beginning of the meeting. Attendance was taken by circulating a sign-in sheet.

In attendance at the meeting were the following individuals:

Members Present

Advisory Group Members

Bob Anderson Professor of Biological Sciences, Wisconsin Lutheran College
Phil Beiermeister..... Environmental Engineer, City of Oak Creek
Dave Giordano Executive Director, Root-Pike Watershed Initiative Network
Craig Helker..... Water Resources Management Specialist, Wisconsin Department of Natural Resources
Laura Herrick, Secretary Chief Environmental Engineer, SEWRPC
Steve Keith..... Principal Environmental Engineer, Milwaukee County Environmental Services
Janette Marsh Nonpoint Source Technical Program Manager,
U.S. Environmental Protection Agency, Region 5
Jacob Fincher Stormwater Program Manager, Southeastern Wisconsin Watersheds Trust, Inc.
Brian Russart..... Natural Areas Coordinator, Milwaukee County Parks
Tom Slawski Chief Biologist, SEWRPC
Kyle Vandercar City Engineer, City of South Milwaukee

Guests and Staff Present

Joseph Boxhorn..... Principal Planner, SEWRPC
Nan Calvert..... Program Manager, Root-Pike Watershed Initiative Network
Aaron Owens Planner, SEWRPC
Katlyn Plier Restoration Ecologist, Milwaukee County Parks
Mark Mittag Senior Project Manager, Milwaukee Metropolitan Sewerage District

Ms. Herrick welcomed all attendees to the second meeting of the Advisory Group for the Oak Creek Watershed Restoration Plan (Plan). Ms. Herrick briefly reviewed the agenda for the meeting, which included review of Summary Notes from the first meeting of the Advisory Group, review of draft Plan chapters 1, 2, and 3, discussion of the December 2018 stakeholder meeting, and discussion of next steps for the Plan.

REVIEW OF SUMMARY NOTES OF FEBRUARY 7, 2018 MEETING

Ms. Herrick briefly reviewed the draft summary notes from the February 7, 2018 Advisory Group meeting. She highlighted the municipal data request for information that has yet to be received by SEWRPC staff. These include the following:

- Capital Improvement Project (CIP) list and costs – for projects such as street improvements and stream crossings.

- Green Infrastructure construction and maintenance costs – for completed projects
- Stormwater flooding concerns – local stormwater flooding issues that the communities would like the SEWRPC staff to evaluate – need by February 2019
- Agriculture (leased land, public gardens) location, long term plans, conservation practices – regarding County, community, and MMSD lands currently leased for agriculture
- Local park and open space plans and trail plans

Ms. Herrick indicated that the data above can be submitted to her via email (lherrick@sewrpc.org). Transmittal of relevant non-digital information can be coordinated through her as well. No questions or comments were offered by the Advisory Group on the February meeting summary notes.

REVIEW OF PLAN DRAFT CHAPTER 1, “INTRODUCTION”

Ms. Herrick next reviewed draft Plan Chapter 1 “Introduction”, starting with the Purpose section of the Plan. Mr. Mittag commented on the description of this Plan as a second-level plan and if this wording is misleading. Ms. Herrick indicated that the second-level plan reference is SEWRPC staff terminology and refers to this Plan as a more detailed analysis for the Oak Creek watershed, building on work completed for the SEWRPC Regional Water Quality Management Plan Update (RWQMUPU). She indicated the text will include a clearer description for the Plan as it relates to previous work.

Ms. Herrick continued the review of the Planning Process section of Chapter 1. Mr. Russart commented that the Fund for Lake Michigan should be included as a funding source in the first paragraph in the Planning Process section. Ms. Herrick indicated this funding source will be added to the text.

Ms. Herrick noted that Map 1.1 will serve as a template for all watershed maps in the Plan. Mr. Mittag commented that the roadway line types were difficult to distinguish from the municipal boundaries on Map 1.1. Mr. Giordano also noted that the intermittent streams were hard to see on the maps and suggested making the line darker or thicker. Ms. Herrick responded that the SEWRPC staff will revise the map so there is better distinction between the roads and municipal boundaries and the intermittent streams are more visible. No additional questions or comments were offered by the Advisory Group for Chapter 1.

REVIEW OF PLAN DRAFT CHAPTER 2, “PRIOR AND ONGOING STUDIES, PLANS, PROJECTS, AND PROGRAMS”

Ms. Herrick introduced SEWRPC staff member Joe Boxhorn to review draft Plan Chapter 2 “Prior and Ongoing Studies, Plans, Projects, and Programs” which outlines previous work that will be used as a starting point for this Plan. Ms. Marsh asked if the Class I and Class II NRCS designations for agricultural lands could be better defined in Section 2.2 under the Nonpoint Source Pollution Abatement subelement. Mr. Boxhorn responded that additional description can be added to the text. Ms. Marsh commented that the agricultural designation includes any lands not part of a municipal separate storm sewer system (MS4). Ms. Marsh also asked if the agricultural land in the watershed has drain tiles. Mr. Owens answered that few drain tiles were found on the mainstem of Oak Creek or the two tributaries surveyed. Drain tiles that were encountered were inventoried. Mr. Russart noted that most County owned agricultural lands is ditched and does not include drain tiles. Mr. Giordano asked how the agricultural lands were determined and noted that for loading calculations it is important to only include actual farmland and not adjacent land uses such as woods. Mr. Russart commented that the Farm Service Agency in Union Grove has good records of farmed lands.

Mr. Russart noted for Section 2.2 under the Inland Lake Water Quality Measures subelement that Milwaukee County Parks about five years ago assessed invasive species at all the ponds in the park system. He will look for that information and pass on to SEWRPC staff.

[Secretary's Note: Mr. Russart provided SEWRPC staff with a file indicating aquatic invasive species present in ponds and lagoons in the Milwaukee County park system.]

Mr. Russart also asked if there is a standard for unacceptably high numbers of waterfowl near water features as mentioned under the Auxiliary Water Quality Management Measures subelement. Mr. Boxhorn responded that action is driven by water quality problems or complaints by the public. Mr. Giordano asked if there were recommendations on reducing pharmaceuticals in the streamflow. Mr. Boxhorn answered that this has been addressed through expanding drug collection programs in past planning efforts. Mr. Giordano commented that we need better data to substantiate that pharmaceuticals concentrations are a problem in our streams. Mr. Vandercar indicated that the City of South Milwaukee has a very successful collection program and he can provide the pounds of pharmaceuticals collected. He did note that finding incineration disposal locations has been more difficult. Mr. Fincher also noted that the Walgreens chain provides collection services.

During discussion of Existing Regulatory Management Strategies, Mr. Giordano asked if any Oak Creek municipalities have stream buffer ordinances. Mr. Boxhorn responded that none of the municipalities in the Oak Creek watershed currently have stream buffer ordinances in place.

Mr. Vandercar noted that for Section 2.3 the City of South Milwaukee is fully built out and does not have a stormwater management plan. He did indicate that the City does follow the Wisconsin DNR municipal separate storm sewer system (MS4) regulations and this should be noted in this section. Mr. Boxhorn indicated text related to stormwater regulation will be added to this section.

Mr. Keith commented under Section 2.4 that in 2016 the Milwaukee County Land and Water Resource Management plan has been extended through 2021. Mr. Boxhorn responded that the text will be updated to reflect this date. Mr. Russart commented that an ecological assessment for County Park parcels in the Oak Creek watershed will be completed by April 2019. He noted that one parcel of County Park land will remain in agricultural use as migratory birds use the cleared fields for resting spots. Mr. Russart will send on the assessment to SEWRPC staff when complete. Mr. Russart also commented that Copernicus Park no longer needs stormwater detention as sufficient storage is now located in the channel corridor. Mr. Russart indicated SEWRPC staff can contact Milwaukee County staff Sarah Toomsen for additional information. Mr. Boxhorn responded that he will reach out to Ms. Toomsen for additional details.

Under Section 2.4 1000 Friends of Wisconsin, Mr. Keith commented that Clean Wisconsin is continuing the ordinance review for green infrastructure project. He noted that Ezra Meyer of Clean Wisconsin would be a good contact for additional information. Mr. Boxhorn responded that he will contact Mr. Meyer for more information.

Mr. Giordano commented that the Section 2.4 Drexel Town Square Development ponds have been specifically vegetated to reduce waterfowl concerns and that Root-Pike WIN uses their design as a model for other projects. Mr. Beiermeister also noted that the City utilizes dogs for waterfowl control at this location. Mr. Boxhorn responded that the text will be updated with this information.

Mr. Russart provided a clarification comment for Section 2.4 under the Grant Park Bioblitz. He commented that this bioblitz was the second for the Milwaukee Public Museum, but the first bioblitz in Grant Park. He

also commented that the partners of the bioblitz should be recognized, including Milwaukee County Parks and Friends of Grant Park. Mr. Boxhorn indicated the text would be updated accordingly.

Mr. Boxhorn asked the Advisory Group for any Citizen Based Monitoring Groups we may have missed in the text or Table 2.7. Mr. Russart suggested this table title include the wording Community-Based instead of Citizen-Based. He also proposed to add the Rusty Patch Bumblebee and Park People Weed Out programs and suggested perhaps a Milwaukee County Parks category in the table. Mr. Russart also offered to write up the Milwaukee County citizen monitoring efforts. Mr. Giordano commented that there are student based monitoring programs active in our area, including universities and high schools. He noted that Root-Pike WIN has been working with UW-Parkside for monitoring and with high schoolers through the WDNR Water Action Volunteers program. Mr. Boxhorn responded that Table 2.7 will be updated with these comments. No additional questions or comments were offered by the Advisory Group for Chapter 2.

REVIEW OF PLAN DRAFT CHAPTER 3, “CHARACTERIZATION OF THE WATERSHED”

Ms. Herrick introduced SEWRPC staff member Aaron Owens to review draft Plan Chapter 3 “Characterization of the Watershed” which provides a broad overview of the natural resource and human-made features of the watershed. Mr. Giordano commented that the Maps in Chapter 3 should better highlight the intermittent streams in the watershed. Mr. Owens answered that the maps would be reviewed with this in mind.

Regarding the description of the Grant Park Ravine Assessment Area in Section 3.2, Mr. Russart requested that birding and photography be added as recreational activities. Mr. Owens indicated these activities will be added to this section. Mr. Anderson asked if the Plan will assess ecological services of natural areas and green spaces such as water quality, air quality, and aesthetics. Ms. Herrick noted that she has not seen a definitive quantification of these services and Mr. Boxhorn added he has not found anything specific to the Oak Creek watershed. Mr. Giordano noted that an increase in property values was documented due to the North Branch Pike River restoration effort. He can provide the graphics from the socio-economic study completed after this effort. Ms. Marsh offered that ecological benefits could be quantified through meeting water quality standards and meeting Total Maximum Daily Load (TMDL) requirements. Mr. Boxhorn responded that Oak Creek is on the 303(d) impaired waters list due to chloride and other pollutants, and there is not a TMDL for the Oak Creek watershed. He noted that MMSD has been monitoring the watershed streams and can be used to evaluate water quality over time which will be summarized in Chapter 4. Mr. Slawski offered that the Nature Conservancy has developed a Wetland by Design tool, supported by the Freshwater Network, and this tool can provide information on ecological loss of services. Mr. Owens responded that the above mentioned tools will be investigated for use in developing Plan recommendations.

Related to discussion on the climate and climate change section within Chapter 3, Mr. Slawski noted that the U.S. Geological Survey has developed the FishVIS tool for the Great Lakes region to evaluate temperature and baseflow conditions with climate change. Mr. Owens indicated that he would investigate the FishVIS tool for potential analysis within the fisheries section that will be included in Chapter 4 as well as for potential recommendations in Chapter 6.

Mr. Owens continued his review of Chapter 3 with Section 3.7 regarding Topography and Geology. Mr. Keith inquired if the Lake Michigan average water level can be added to Map 3.13 with the generalized surface elevations. Mr. Owens responded that we can consider adding a label to this map.

[Secretary’s Note: After discussion subsequent to the Advisory Group meeting, SEWRPC staff determined it was not appropriate to add a reference to Lake Michigan’s long-term water level (which is typically reported to the nearest hundredth of an inch) to Map 3.13.as this map shows generalized elevations to the nearest 10 feet

above NGVD. Lake Michigan's water levels will be briefly discussed in Chapter 4 of the Report.]

Mr. Owens continued the review of Chapter 3, discussing Section 3.9 Natural Resource Elements. Ms. Marsh asked if any natural areas or critical species habitat sites were removed as part of the 2017 SEWRPC site visits. Mr. Owens responded he did not think so based on the GIS mapping, and Mr. Slawski indicated he will confirm with Dan Carter who performed the site work. Mr. Giordano asked about transmission line corridors and if there are any requirements for vegetation that could enhance habitat. Mr. Russart indicated that for utility corridors on County land, there is a requirement to not spread invasive species and the utilities require mature plant heights less than 15 feet.

Mr. Giordano inquired why there were no fish species in Table 3.16 for endangered and threatened species. Mr. Slawski responded that to his knowledge there are no endangered or threatened fish species found within the streams of the Oak Creek watershed. Mr. Owens indicated that he would confirm this and said that a note indicating that no such species are found within the watershed will be added to Table 3.16. Mr. Russart commented that the digger crayfish has been found within the watershed and noted that it was on the County's list of species of local interest. He added that he thought the species might now be listed as a Statewide species of special concern and suggested this be investigated and added to Table 3.16 if necessary. Mr. Owens indicated that he would check the listing status of the digger crayfish.

[Secretary's Note: Subsequent to the advisory group meeting, SEWRPC staff confirmed that the digger crayfish is not listed as a special concern species on the State of Wisconsin Natural Heritage Working List.]

Mr. Anderson asked if a baseline list of important species or an index of diversity could be developed for the Plan. Ms. Herrick responded that the SEWRPC staff will consider creating this once Chapter 4 is fully developed. Mr. Russart added that Milwaukee County Parks maintains a list of species that they consider to be of local conservation interest. He suggested that this list may be helpful in formulating a baseline list of important species for the watershed. He indicated that he would provide this information to SEWRPC staff.

Mr. Owens continued the review of Section 3.9 Wetlands. Mr. Russart commented that the wetland communities could be better defined on Map 3.19, specifically forested wetland communities versus upland forest. Mr. Owens indicated he will review the GIS information and see if this information can be developed. Mr. Russart also noted that the County has a GIS layer for ephemeral wetlands which he can share. Mr. Owens responded that a map may be added to highlight ephemeral wetlands in the watershed.

[Secretary's Note: Map 3.19 has been updated to include wetland community types as reported by the WDNR's Wisconsin Wetland Inventory. In addition, the location of ephemeral wetlands that have been identified by Milwaukee County Parks Natural Areas staff have been added to Map 3.19. Descriptions of the wetland community types found within the watershed have been added to the text within the discussion of wetlands in Section 3.9.]

Mr. Russart commented that Section 3.9 Wildlife Habitat can be expanded for terrestrial species and he can provide additional information. Mr. Russart also indicated that he can provide a list of invasive species that are currently managed within County Park properties.

[Secretary's Note: Subsequent to the Advisory group meeting, Mr. Russart provided additional text that incorporates wildlife data collected through surveys conducted by Milwaukee County Parks Natural Areas staff. In addition Mr. Russart provided

information on invasive species within Milwaukee County Parklands, including species lists and a shapefile of known geographic locations of invasive species. The additional information provided will be incorporated into the discussion related to Wildlife Habitat and Invasive Species. This discussion, formerly within Section 3.9, will be moved to Chapter 4 of the Report.]

Under the Section 3.9 Groundwater topic, Mr. Giordano asked if road salt application and groundwater contamination will be addressed in the plan. Ms. Herrick noted that most of the Oak Creek watershed residents are on municipal water supply from Lake Michigan. Ms. Marsh commented that there may be larger agricultural wells in the watershed. Mr. Boxhorn answered that very little data exist connecting surface salt application and drinking water supply contamination, but a detailed look at the available groundwater quality data will be included in Chapter 4. Mr. Keith inquired if a longitudinal cross section for the geology and groundwater features could be added to Chapter 3. He added it could be somewhat generic in nature, but would provide a visual for the groundwater discussion. Mr. Owens responded that he will research adding this figure.

[Secretary's Note: A figure titled "Conceptual Hydrogeologic Cross Section Through Southeastern Wisconsin" has been added as Figure 3.7.]

Ms. Marsh commented that the Hydrologic Unit Code (HUC) should be added to the Plan text. Mr. Owens responded that the HUC codes will be added as appropriate to the text.

[Secretary's Note: Reference to the Hydrologic Unit Code (HUC) for the Oak Creek watershed was added to Section 1.1 in Chapter 1 of the Report.]

No additional questions or comments were offered by the Advisory Group for Chapter 3.

Subsequent to the Advisory Group meeting, SEWRPC staff developed a map to show areas of the watershed that contain hydric soils. The new map is numbered 3.16 and previous map numbers in the Chapter have been updated to reflect this addition. A short section describing hydric soils in the watershed was added in Section 3.8.

STAKEHOLDER MEETING DECEMBER 2018

Ms. Herrick announced to the Advisory Group that the next stakeholder meeting will be held December 13, 2018 from 6 pm to 7:30 pm at this location in South Milwaukee. Topics to be discussed include a brief review of draft Plan Chapters 1, 2, 3, and then Dr. Julie Kinzelman will summarize the 2016-17 water quality data her staff collected in the Oak Creek watershed. This data will be included along with all the other data compiled by SEWRPC staff to be summarized in Chapter 4.

Mr. Giordano inquired if contaminated sites in the watershed will be summarized in Chapter 4 as well. Mr. Vandercar also asked about slag fill sites and capped sites. Mr. Boxhorn responded that we are compiling all data we can find on contaminated sites, and if communities or others have additional data we will include it in the Plan. No additional questions or comments were offered for the next stakeholder meeting.

NEXT STEPS FOR PLAN DEVELOPMENT

Ms. Herrick discussed the next steps for plan development. She indicated that SEWRPC staff will continue working on Chapter 4 "Inventory Findings" with the intent to present the chapter to the Advisory Group over two meetings in 2019. No questions or comments were offered for the next steps for the Plan.

ADJOURNMENT

There being no further business, the meeting was adjourned by unanimous consent at 11:35 a.m.

Respectfully submitted,

Laura Herrick
Recording Secretary

ELECTRONIC COMMENTS RECEIVED FROM MMSD DECEMBER 3, 2018

Mr. Mittag provided additional comments via email to Ms. Herrick on December 3, 2018. Responses to his additional comments are summarized here for completeness.

Mr. Mittag responded to the previous meeting request for additional information on the future of lands in the Oak Creek watershed in the MMSD's Greenseams program. He indicated that the properties are all currently farmed, and that the long term plan is to convert them to prairie and then turn them over to a local partner for management. Currently some of the farmed Greenseams properties include Hmong farmers cultivating small areas of land.

For Chapter 1 in the Focus Areas section, he asked if the Plan was going to consider climate change and higher flows in the future as part of the targeted stormwater drainage and flooding issues. SEWRPC staff response is that potential climate change impacts to air temperature, rainfall, and water resources are discussed in Chapter 3. Chapter 6 will recommend projects that will, amongst other goals, aim to reduce climate change impacts.

Regarding discussion in Chapter 2 related to the RWQMPSU's "Instream Water Quality Management Measures" subelement, Mr. Mittag asked if the current buffer widths in the watershed would be analyzed. He further stated that there may be flooding implications if floodplain areas are converted from farmed agriculture to a vegetated buffer. SEWRPC staff responded that existing riparian buffer widths will be analyzed in Chapter 4 for the streams within the watershed. There may be implications for higher floodwater elevations with changes in land use in the floodplain, but as the agricultural land use in the watershed is relatively small, changes in flood elevations will most likely be minimal due to vegetation changes.

Regarding discussion of floodplain regulations in both Chapters 2 and 3, Mr. Mittag indicated that development within the floodplain does occur in the watershed and that it should not be assumed that local floodplain ordinances alone protect land from being developed. MMSD staff have reviewed multiple applications for development in the floodplains of the Oak Creek watershed. A footnote was added to the discussion of regulatory floodplains in Chapter 3 indicating that although all municipalities within the watershed have adopted floodplain ordinances, there have still been instances of developments that have occurred within the watershed. SEWRPC staff will continue to make this distinction in future chapters of the Plan.

Mr. Mittag offered a general comment for tables in Chapter 2 related to adding information that would be helpful to partners for prioritizing projects. He provided the example of Table 2.4 which listed the protection status of Natural Areas and Critical Species Habitat Sites, and offered that it also include if the properties are in the floodplain or currently farmed. Mr. Mittag also commented on Map 2.1 which depicted potential restoration areas from the RWQMPSU, noting that additional information on current public or private ownership would be helpful. SEWRPC staff responded that those details will be provided, to the extent possible, in the discussion of specific recommendations in Chapter 6 of the Plan.

Regarding Map 3.12 which shows sanitary sewer service areas within the watershed, Mr. Mittag commented that not all of the buildings in the mapped as sanitary sewer service area are connected to the system and served by the District. SEWRPC staff has added text to the section to clarify that some buildings located within the sanitary sewer service areas are still served by onsite sewage disposal systems.

Related to discussion in Section 3.6 on the record frequency and magnitude of heavy precipitation within the State in the decade between 2001 and 2010, Mr. Mittag commented that the wording of the sentence was not clear.

[Secretary's Note: The paragraph was edited to read as follows: "The frequency and magnitude of heavy precipitation events has also been increasing in Wisconsin. Extreme rainfall patterns in the City of Madison illustrate this trend. In the decade between 2001 and 2010, there were 24 days in which 2.0 inches or more of precipitation fell in a single event. This is twice the previous maximum of 12 days with 2.0 or more inches of precipitation, which occurred in the decade between 1951 and 1960."]

Mr. Mittag noted that Map 3.6 in Section 3.8 Soils shows the General Mitchell International Airport area as having steep slopes (6-12 percent) and typically airports are fairly flat. SEWRPC staff also questioned this before the meeting and confirmed that the steep slope designation is correct according to the NRCS database.

ELECTRONIC COMMENTS RECEIVED FROM MILWAUKEE COUNTY AND CITY OF RACINE HEALTH DEPARTMENT APRIL 2, 2019

Advisory Group members were provided an electronic copy of revised draft Chapters 1, 2, and 3 of the Oak Creek Watershed Restoration Plan on March 19, 2019. The revised draft chapters incorporated the comments documented above. Mr. Keith and Ms. Kinzelman provided minor additional comments to the revised draft chapters via email on April 2, 2019. Their additional comments have been incorporated as appropriate in the Final Draft Chapters on the project website.

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