

Environmental Advisory Committee

MEETING DATE – OCTOBER 13, 2020

LIAISON REPORT – REBECCA SMITH

Lower Peace River Proposed MFL

Mr. Yonas Ghile, lead hydrologist, presented the proposed minimum flow levels (MFLs) for the Lower Peace River. He explained the District's approach for setting MFLs including criteria used for protection of resources. Current reevaluation suggests the permitted minimum flows are currently met and are projected to be met during the next 20-year planning period.

Ms. Becky Ayech applauded staff for the improvement of MFL evaluations and identified evaluations being based on flows rather than a set period, noting rain patterns have shifted. ***Ms. Ayech made a motion for the committee to support the MFL for the Lower Peace River.***
Discussion ensued:

Mr. Alan Bailey asked where the permanent hydrographic gaging stations along this section of the Peace River are located. Mr. Ghile identified five United States Geological Survey (USGS) gages and stated the data collected is available to the public.

Mr. Bailey asked for the projected range of sea-level rise at the mouth of the Peace River and Charlotte Harbor. Mr. Doug Leeper, MFLs program lead, referred to the draft report and identified sea-level rise estimates of low, intermediate, and high projections to be at 0.4, 0.7 and 1.1 feet between 2010 and 2035.

Mr. Sid Flannery asked whether the Peace River Manasota Regional Water Supply Authority is managed or regulated on the seasonal block method and whether withdrawal percentages within their permit must change to comply with the new flow-based schedule. Mr. Ghile responded in the affirmative.

Mr. Flannery asked whether the integrated model for withdrawal and land use account for the effects of phosphate mining at the Upper Peace River basin. Mr. Ghile responded in the affirmative. Mr. Flannery suggested for future MFL evaluation to include the middle Peace River. Mr. Ghile said staff are considering this.

Mr. Gordon Colvin appreciates the substantial improvements to the hydrologic and engineering analyses; however, he cannot fully support the motion without a more in depth understanding of the ecological modeling and significant harm threshold and associated uncertainty. He noted the uncertainty referencing the Homosassa and Chassahowitzka rivers. Mr. Colvin requested a future discussion on this.

The motion passed with five votes in favor. Five committee members abstained.

Charlotte Harbor SWIM Plan

Ms. Lizanne Garcia, lead project manager, provided an overview of the development and approval process for the 2020 Charlotte Harbor SWIM Plan. She explained the 2020 SWIM Plan update complements the recent Charlotte Harbor National Estuary Partnership (CHNEP) Comprehensive Conservation Management Plan update and includes three major focus areas: water quality, hydrologic restoration, and natural systems. Ms. Garcia noted the plan going to the Governing Board should be available to the public by November 3, 2020.

Ms. Ayech requested further discussion of the Flatford Swamp project, including a discussion of

the model used to assess ag water in the Upper Myakka River as well as the process of the injection wells. Ms. Garcia explained this is recognized in our SWIM Plan as a project that will assist in the restoration and protection of the Charlotte Harbor watershed and suggested the appropriate project manager provide additional information.

Mr. Bailey asked if there are any plans for land acquisitions as part of project for Charlotte Harbor. Ms. Garcia said she would follow up on this question. Mr. Dwayne Carlton mentioned in addition to purchasing properties, conservation easements have similar effects on water quality where future land use is going to be.

District Seagrass Mapping Update

Dr. Chris Anastasiou, chief water quality scientist, explained the process and significance of the District's aerial seagrass mapping. He explained the 2020 mapping cycle covers the entire coastline and includes two phases: the acquisition phase (photographing) and the mapping phase (photo interpretation). Dr. Anastasiou identified Florida's West Central coast trends, specifically Tampa Bay area, which reflects a downward trend in seagrass between 2016 and 2018.

Ms. Ayech asked whether the downward trends are related to land use, such as nitrogen loading. Dr. Anastasiou explained staff evaluate this in partnership with estuary groups, however, a definitive conclusion has not been drawn.

Mr. Ed Sherwood thanked the District for seagrass projects and requested efficiencies, if possible, to have a quicker response for other environmental agencies to assist. Ms. Hecker agreed with this request on behalf of CHNEP. Dr. Anastasiou identified this request in the lessons learned following the 2020 mapping.

The Occurrence of Filamentous Macroalgae Blooms in Southwest Florida Estuaries

Dr. Chris Anastasiou updated the committee on what is happening with filamentous macroalgae in Southwest Florida estuaries as well as actions being taken. Dr. Anastasiou identified an accumulation of algae over the last few years and suggested a quantifiable study be conducted to determine why this is happening. He explained the District is working on addressing filamentous macroalgae studies through the SWIM program and partnerships with other organizations.

Mr. Bailey suggested the macroalgae accumulation in Lemon Bay may be due to the area being mostly landlocked. Dr. Anastasiou explained nutrient factors are important factors but physical factors need to be looked at as well.

Hydrologic Conditions Update

Mr. Granville Kinsman, hydrologic data manager, provided an update on the District's hydrologic conditions. He explained rainfall for September produced an overall above mean average with some areas below normal. Mr. Kinsman explained the region's water supplies are healthy and should carry through any droughts in the next season.

Mr. Flannery asked if percentiles are updated annually as new data becomes available. Mr. Kinsman explained these percentiles are revised every month.