



Water Quality Data Analysis Report for the Charlotte Harbor National Estuary Program

This report provides an extensive data compilation and analysis of water quality trends including rainfall, streamflow and surface water quality data collected throughout the Charlotte Harbor National Estuary Program (CHNEP) study area. The purpose of the report is to compile data for this extensive area, describe time series trends of these important indicators of environmental condition and report that information in an easily accessible format that can be effectively used by natural resource managers to characterize water quality conditions over an expansive area of southwest Florida. The analyses presented within incorporate the preponderance of data collected over the last century in basins that maintain an active monitoring program. For rainfall and streamflow these records may date back to 1940's while for water quality, the initial collection dates for routine monitoring programs tended to be in the early 1990's.

- [Main Body of Report](#) (12.2MB)
- [Appendix 2-1](#) – Information about quality assurance codes used to screen the data as described by FDEP methods (770KB)
- [Appendix 2-2](#) – *Controlling the False Discovery Rate: A Practical and Powerful Approach to Multiple Testing*. Yoav Benjamini, Yosef Hochberg. Journal of the Royal Statistical Society. 2009. (244KB)
- [Appendix 3-1](#) – Detailed time-series plots for each basin, site and metric evaluated. (2.80MB)
- [Appendix 3-2](#) – Flow duration curves corresponding to the three relevant periods of record covered in this report. (181KB)
- [Appendix 4-1](#) – Detailed statistical results for rainfall trend testing for each basin for the rainfall data period of record. (838KB)
- [Appendix 4-2](#) – Detailed statistical results for rainfall trend testing for each basin for the rainfall data period of record. (1.27MB)
- [Appendix 6-1](#) – Detailed water quality trend test results derived using Seasonal Kendall Tau (SKT) test for trend method. (5.63MB)
- [Appendix 6-2](#) – Detailed water quality trend test results derived using the parametric time series model. (4.12MB)