

**WATER QUALITY AND HABITAT ASSESMENT FOR THE QUEEN SNAKE
(REGINA SEPTENVITTATA) WITHIN MONROE COUNTY. O. Mejia, K.
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Urban and agricultural runoff have caused the once abundant Queen Snake to decline as, their primary food source, crayfish have only a moderate tolerance to low dissolved oxygen levels, which correlate to high levels of biological oxygen demand (organic waste) and elevated nutrient levels. Since water quality has an important influence on the survival of the Queen Snake, conducting water quality assessments (chemical, biological, and physical) and determining pollution sources at potential habitat sites is therefore an important part in developing a management strategy for this species. The objective of this project is to assess water quality around various sites in Monroe County and beyond to determine potential Queen Snake habitats, in hopes of observing and documenting any Queen Snake populations. By monitoring these sites throughout the summer, we will determine seasonal nutrient loadings and potential sources of pollution which will be analyzed through field surveys and geographic information systems. This data will then be used to measure the viability of given aquatic ecosystem in supporting present/future Queen Snake populations.