Microbiological perspectives - The impact of wastewater disposal systems on Florida's coastal waters

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Florida's coastal waters are an important resource for recreation, tourism and fisheries and have great ecological significance. Florida contains the full spectrum of aquatic systems, which include freshwater springs, rivers, lakes, brackish waters, estuaries, vast expanses of both shallow and deep water marine systems and the only reef system of any significance within the boundaries of the continental United States. Human wastewater contamination of coastal water in the State of Florida is a significant problem that affects both ecological and public health. Management decisions regarding wastewater treatment, use of wastewater systems and disposal of black water and sludge will have economic impacts on communities and the State. This presentation will provide a summary of the types of wastewater disposal systems Floridians utilize within their coastal environment and the scientific evidence to date which demonstrates a significant human and environmental risk from wastewater associated microorganisms, nutrients, and chemicals.

Keywords – microbiology, water quality, human health, ecosystem health Challenges – public and ecosystem health Issues – Socioeconomic impact