Temporal and Spatial Characterization of Trace Metals in Wastewater Streams in the West Bank

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Abstract:

Six major wastewater streams in the West Bank were monitored for twenty one trace metals and other chemical content. Stream-wastewater samples were collected for the six streams over four month's duration from September 2010, to February 2011 to cover dry and wet seasons. Each wastewater stream was sampled six times or monthly and from the same location. Samples collected were spatially different in quality for each stream reflecting the nature of water use in the various locations. Temporarily, samples collected had three trend natures: decreasing, small or no changes, and increasing from dry (fall) to wet (winter) season. Results are discussed relevant to each stream, to the monitoring season, to the spatial distribution, and to possible causative factors contributing to stream wastewater quality.