Monitoring and base-line data collection programs are currently in place for water and sediment quality, mangrove plants, mangrove sediment fauna, aquatic pests, fish, seagrass, algae, coral and dolphins. There is also microbiological monitoring of Darwin and Mandorah beaches, as well as Lake Alexander, for their suitability for swimming. Most monitoring is undertaken in the estuarine and marine waters, rather than the rivers and streams.

