

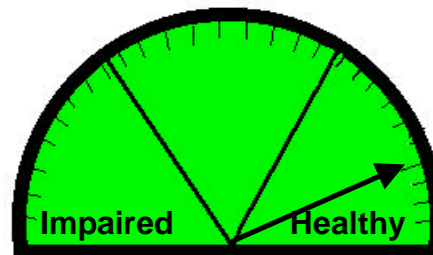


ECOSUMMARY

A Biorecon Assessment

BioRecon: A rapid, cost-effective screening mechanism for identification of biological impairment.

**Surface Water Assessment & Monitoring Program
South District**



Stream Health

Myakka River at State Road 70, Manatee Co.

March 5, 1997

Purpose

A BioRecon sampling was performed at the Myakka River in order to examine the water quality in the river, and document the organisms that inhabit a relatively unimpacted stream in this geographical area. This is important because data from a variety of streams is needed to refine the biological thresholds on which BioRecon is based.



Myakka River

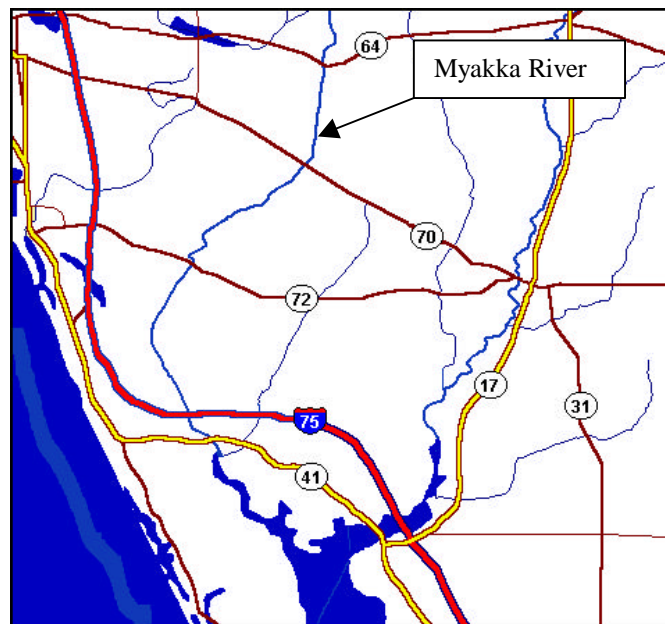
Basin Characteristics

The drainage basin for the Myakka includes native and improved pasture, forest, some agriculture, and rural residential areas. Major land uses in the area include low density grazing and small agricultural areas. The river flows into Charlotte Harbor.

Results

☺ The BioRecon indicated that the Myakka River supports a very healthy aquatic community.

The site is located in a public park with an open grassy riparian (stream bank) zone on one bank. The other bank is lined with



willows, sloping up to pasture with trees. The in-stream habitat consisted of sand (51%) with 30% aquatic vegetation (mainly hydrilla), about 15% undercut banks/exposed roots, and a few snags. Flow was strong (0.3 m/sec). **The Myakka passed all three BioRecon thresholds for a healthy stream by wide**

margins. There were **36** different taxa (minimum threshold = 18), a Florida Index score of **19** (threshold = 10), and **10** caddisflies or mayflies (threshold = 4). All water chemistry parameters met Class 3 standards.

Significance

These results indicate that this river supports a very healthy, diverse aquatic community.

Present land use in the upper Myakka basin does not appear to affect the river's ability to support a healthy community. Potential future problems include intensified agricultural and residential development. Hydrilla, an exotic plant, can cause problems if it becomes overgrown.

Suggestions



Encourage best land management practices in the basin, encourage landowners to maintain healthy stream bank habitat, and maintain a monitoring program to further refine BioRecon thresholds for streams.

For more information call Albert S. Walton, Jr., 941-575-5814 or write DEP, 7451 Golf Course Blvd., Punta Gorda, FL 33982, attn.: Albert Walton.