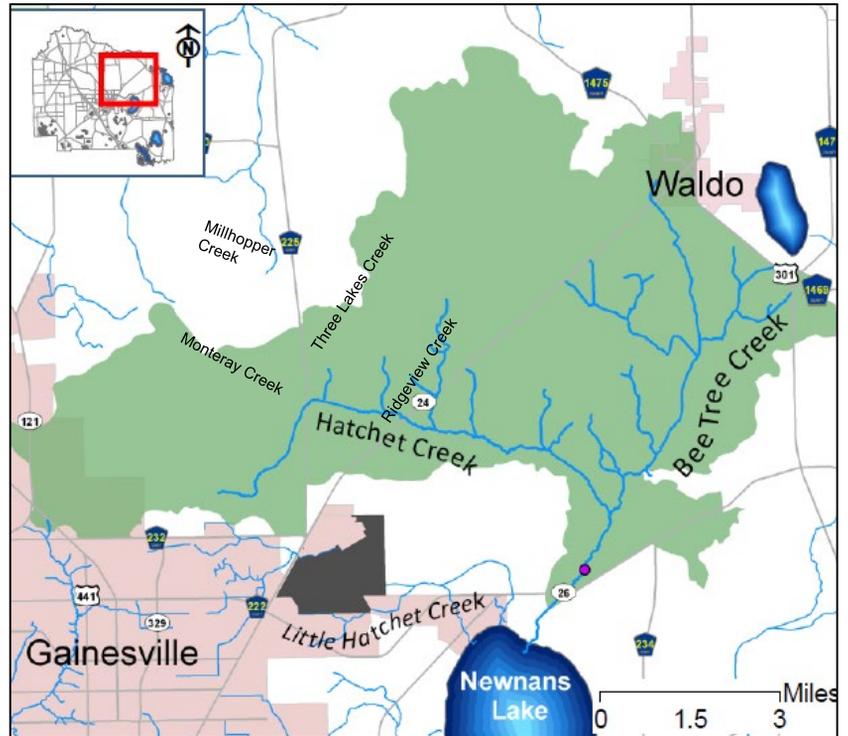




Hatchet Creek Fact Sheet

The Watershed

- The Hatchet Creek watershed spans 65 square miles of rural land, mostly located outside the city limits of Gainesville in unincorporated Alachua County.
- Approximately 50% of the land in the watershed is devoted to timber production, 20% to agriculture, 20% to natural forest habitat, and 10% to low density residential areas and commercial facilities.



Map of Hatchet Creek watershed (green) with sampling sites (purple circles).

Potential Pollution

- Naturally occurring phosphorus from the Hawthorne Group formations may contribute to elevated phosphorus levels due to cutting and scour from stormwater flow.
- Failing septic systems, failing wastewater infrastructure, wildlife, and pets can all introduce fecal material which is a source of nitrogen, phosphorus, and fecal coliform bacteria.



Hatchet Creek.

In-Stream Biology

The Hatchet Creek watershed has more natural habitat than any of the watersheds in urban Gainesville. This stream maintains high quality habitat because only small amounts of stormwater enter this stream, since natural and timber land dominate this watershed. Hatchet Creek near CR225 has the most diverse population of in-stream macroinvertebrates found in Alachua County creeks. In 2013, Hatchet Creek at Buck Bay received an optimal rating in the habitat assessment, an improvement from the suboptimal rating in 2009.

Water Quality

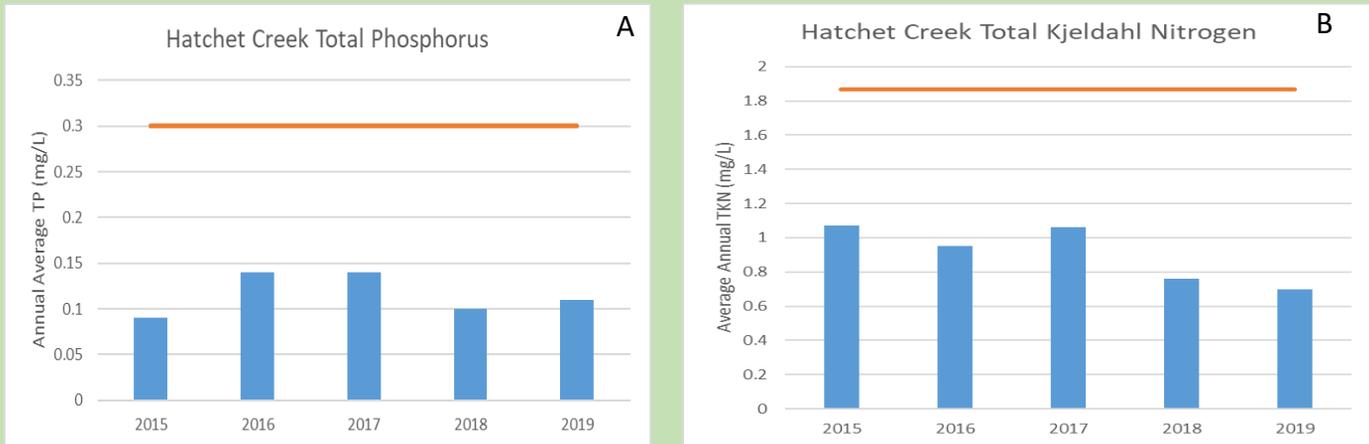


Figure 1. Annual average of A) total phosphorus (TP) and B) total Kjeldahl nitrogen (TKN) with numeric nutrient criteria displayed as orange line. Combined data from ACEPD and SJRWMD.

Nutrients: The FDEP water quality rule on nutrient standards went into effect February 2016. Hatchet Creek is below the Numeric Nutrient Criteria (NNC) threshold for total phosphorus (TP) and total nitrogen (TN). Phosphorus sources include the erosion of phosphorus rich soils that compose the Hawthorn clays which underlay the stream bed, as well as potential agricultural inputs of fertilizer.

Current Human Impacts

- Agricultural runoff of fertilizers and pesticides from misuse or mismanagement may impact water quality.
- Livestock operations neighboring the creek may introduce nutrients and fecal contaminants, while damaging riparian habitat.
- Timber production in the watershed can temporarily cause increased runoff after clear cutting a timber stand.

