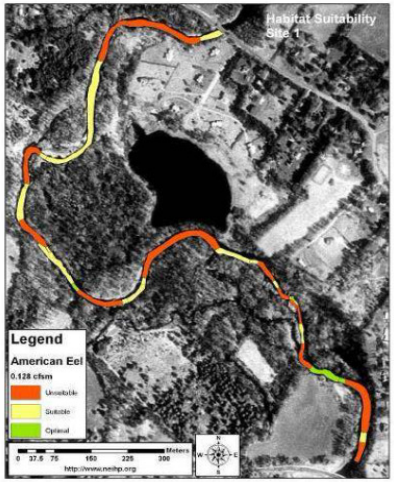
How well is the Pomperaug River flowing?
…. Ask the fish!

The rivers ran dry…
In 1999, the Pomperaug, Nonnewaug, and Weekeepeemee Rivers experienced **extreme low flows** and, in some areas, completely **dry channels** resulting in stressful, if not deadly, conditions for river-dwelling animals.

This raised concerns of local residents, who founded the Pomperaug River Watershed Coalition, about whether or not there was enough water in the Pomperaug River, its tributaries and its underlying aquifer to fulfill human consumption needs while leaving enough water instream for fish and wildlife.



The fish population was surveyed and instream habitat was assessed…
Piotr Parasiewicz, scientist from the University of Massachusetts, was hired to map the existing instream habitats at different low flow conditions and survey the fish populations.

Habitat suitability was evaluated…
Based on the habitat needs of particular fish at critical growth periods throughout the year, the overall suitability of existing habitat could be ranked as unsuitable, suitable, or optimal at different streamflow rates (example map left).

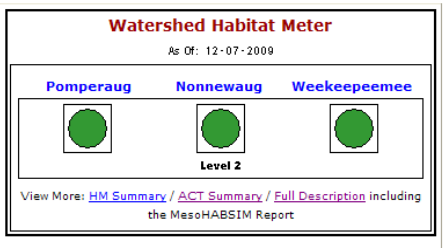
Health of river determined…
Overall, the Pomperaug, Weekeepeemee, and Nonnewaug Rivers have "**vibrant fish populations**" when compared to what you would expect to find in a similar river with an undeveloped watershed. However, **habitat can be improved**.

Habitat restorations recommendations…

- Reconnect the river to its floodplain near 3 Rivers Park in Woodbury and near the "Bent of the River"/Transylvania Brook in Southbury.
- Raise the streambed to establish more riffle and sidearm habitat with large woody debris.
- Remove dams that act as barriers to fish passage within in the Pomperaug River system, including those in the Housatonic River.
- **Follow streamflow recommendations** until restoration can be achieved.

Establishing streamflow recommendations…
Thresholds for how long and frequently low streamflow events can last before stressing fish populations in both the short-term and the long-term were established by linking habitat suitability data to the historical streamflow record. This information was used to develop flow recommendations for each of the three rivers to ensure a healthy fish population while also meeting human water needs.

The Habitat Meter…
By visiting www.pomperaug.org, people can quickly glance to see how well the rivers are flowing, and note whether the watershed community should make efforts to conserve water use to maintain streamflow. The meter was created using streamflow recommendations.



Summary…
The Pomperaug River Watershed supports a healthy fish population that can improve by restoring certain types of habitat in key locations. Until then, the population can be maintained by following the streamflow recommendations outlined in the MesoHABSIM report for the watershed.

For More Information…

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