

# Hydrothermal Monitoring and Modeling Saugus, Massachusetts

## Services Rendered

- Hydrothermal Monitoring
- Hydrothermal Modeling
- Permit Negotiation Support

## Project Summary

Applied Technology & Management, Inc. (ATM), working with Applied Science Associates, Inc. (ASA) and Environmental Strategic Systems, Inc. developed a field monitoring and modeling program to evaluate the environmental impacts of thermal effluent from the Refuse Energy Systems Company (RESCO) and General Electric (GE) facilities which discharge to the Saugus River.

ATM scientists developed and applied a three-dimensional, hydrodynamic and temperature model system to predict the dynamic temperature response of the river to the thermal effluents. The model was calibrated to detailed, time varying temperature observations in the river for the present conditions. The model was then used to predict impacts of pump volume flux and heat load variations on the river.

ATM scientists supported RESCO and GE personnel and consultants in permit negotiations with the Environmental Protection Agency and the Massachusetts Department of Environmental Protection.

