



## Trout Hatchery Planning, Design, and Construction

*Rolling Rock Club  
(Ligonier, PA)*

**SUMMARY:** A new hatchery was designed and constructed for the Rolling Rock Club that consolidated fish culture activities into one area on a secure water source. The hatchery raises brook, brown, rainbow, and tiger trout to stock into surrounding streams, providing recreational fly-fishing opportunities for club members.

**CHALLENGE:** Prior to constructing the new hatchery, the club raised fish in numerous locations across the property and experienced below average production due to problems from poor water quality, disease, and bird predation. An artesian well at the site provides a gravity-flow, pathogen-free water source for fish culture, but does not have optimum water quality for fish culture.

**SOLUTION:** Water treatment equipment was designed and installed to address the water quality concerns of the artesian well. New fish culture systems were designed around the biological production goals of the hatchery for construction in one location. Elevation changes at the existing site were utilized to implement partial water reuse within the fish culture systems by gravity, eliminating the need to pump water.

**RESULTS:** Construction of the new hatchery was completed in the fall of 2006. Two new buildings provide indoor, controlled environments for circular fish rearing tanks, eliminating bird predation, and reducing potential fish disease risks. Design drawings, specifications, and related documents were developed for the general contracting bid process. Project management activities and construction administration were provided during the design and construction of the new hatchery.

### **SERVICES PROVIDED:**

- Production Modeling
- Conceptual Design
- Final Design
- Project Management
- Construction Management
- Permit Assistance
- Operational Assistance