

VIRGIN RIVER PROGRAM - FISH TREATMENT – VIRGIN & SANTA CLARA RIVERS

The Utah Division of Wildlife Resources in coordination with the Washington County Water Conservancy District and the U.S. Fish and Wildlife Service is conducting a treatment project to benefit and protect native fish species in the Virgin and lower Santa Clara rivers. The project is scheduled to be conducted during the week of October 3 -7, 2011.

The project includes treating the Virgin River from the Johnson Diversion in Washington, downstream to a barrier near the Arizona border, as well as inflows and marshes in the watershed. The Santa Clara River will be treated on October 3 and 4 from the town of Santa Clara downstream to the confluence of the Virgin River. Rotenone will be used to remove non-native problem fish – Red Shiner and Fathead Minnow. Just prior to the rotenone treatment, efforts will be made to salvage native fish from the area and move them to adjacent non-treated areas.

Red Shiner and Fathead Minnow have recently expanded in the Virgin River drainage. Red Shiner moved upstream during last winter's flooding and Fathead Minnow invaded the lower Santa Clara River from nearby ponds. In areas where these fish have become abundant, native fish populations have declined. Past treatments have been successful in preventing invasive fish from spreading upstream. The present project is intended to remove Red Shiner and Fathead Minnow and thereby increase available habitat for native fish.

Future plans call for additional projects and treatment of the river in systematic steps. The project is part of the Virgin River Program, a collaborative effort among federal and state agencies, the Washington County Water Conservancy District, municipalities, and other local entities to cooperatively manage the river and water resources. The Programs goals is to balance human interests and conservation of the unique Virgin River system.

Rotenone, the chemical used to treat the river, is a natural product that totally decomposes without leaving any harmful residues. It is derived from roots of South American plants and is specifically toxic to gilled organisms (primarily fish and aquatic invertebrates). At the same time, rotenone poses no threat to other wildlife, birds, livestock or humans at the concentrations used. UDWR has used rotenone as a fish toxicant on many projects and has not had any problems with its use concerning human safety, recreation, irrigation, or livestock.

In order to avoid any downstream impacts (outside of the target area), the rotenone will be detoxified downstream at the Stateline Fish Barrier. Potassium Permanganate ($KMnO_4$), a commonly used water purifier, will be added to the stream to bind and neutralize the rotenone. Although Potassium Permanganate will turn a short portion of the river purple, it is harmless and breaks down in a very short time.

For further information, contact the Utah Division of Wildlife Resources at 435-879-8694 or 435-865-6100.