MEG AND BERT RAYNES WILDLIFE FUND
Status Report
February 2018

Organization: Jackson Hole chapter of Trout Unlimited (JHTU)
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Contact information for the person(s) responsible for directing the funding: Leslie Steen, Snake River Headwaters Project Manager, Trout Unlimited, lsteen@tu.org, 307-699-1022 and Rick Will, Treasurer, Jackson Hole Trout Unlimited, rick.will@myfw.com, 307-256-8833

Title of grant: 2017-2018 Jackson Hole Adopt-a-Trout Program

Use of Funds:
- The Meg and Bert Raynes Wildlife Fund grant supported the purchase of the radio tags.

<table>
<thead>
<tr>
<th>Expenses</th>
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<tbody>
<tr>
<td>30 Radiotags</td>
<td>$8,700</td>
</tr>
<tr>
<td>Radio antennas</td>
<td>$300</td>
</tr>
<tr>
<td>Tracking flights</td>
<td>$2,000</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$11,000</strong></td>
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<table>
<thead>
<tr>
<th>Partner Contributions</th>
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<tbody>
<tr>
<td>Meg and Bert Raynes Wildlife Fund</td>
<td>$1,000</td>
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<tr>
<td>Friends of Fish Creek</td>
<td>$3,000</td>
</tr>
<tr>
<td>Jackson Hole Trout Unlimited</td>
<td>$5,000</td>
</tr>
<tr>
<td>Teton Conservation District</td>
<td>$2,000</td>
</tr>
<tr>
<td><strong>Total Income</strong></td>
<td><strong>$11,000</strong></td>
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</tbody>
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Status of Project: The project is ongoing. The research study will continue through spring 2018, with analysis occurring in fall 2018. The educational program will continue through June 2018.

Goals and Objectives:
- Determine native Snake River cutthroat trout habitat use, including holding, wintering and spawning habitat.
  - The 2017-2018 Adopt-a-Trout program is organized around a radio telemetry study of native Snake River cutthroat trout movement in the Fish Creek drainage, conducted by Trout Unlimited, Grand Teton National Park, and the Wyoming Game and Fish Department. Thirty fish have been surgically implanted with radio tags, with the study currently ongoing. Fish movements are being monitored through two fixed antenna telemetry stations, telemetry tracking flights, and hand tracking on foot and by vehicle. 15 fish have been released into Fish Creek, and their movements and mortality rates compared to fish released into the Granite Supplemental irrigation ditch.
• Identify barriers to cutthroat trout migration and areas of entrainment into irrigation ditches.
  o 15 fish have been released into the Granite Supplemental irrigation ditch, a ditch that diverts water from the Snake River into ranch lands and developments in the Fish Creek drainage. Project partners tracked and mapped where fish released into the irrigation ditch ended up at the close of the 2017 irrigation season.

• Use data to inform future on-the-ground stream restoration and reconnection work.
  o Data collection is ongoing, and will be analyzed in fall 2018. We anticipate continuing the Granite Supplemental irrigation ditch entrainment study component in summer 2018 with project partners to gain an additional year of movement and mortality data.

• Educate 200 Jackson Hole Middle School students about coldwater fisheries and watersheds.
  o The 2018-2019 school year Adopt-a-Trout programming is ongoing.
  o Over 200 Jackson Hole Middle School students have been educated to date through two field days held at the Old Wilson Schoolhouse / Owen Bircher Park and 3 classroom days held at the Jackson Hole Middle School. The field day educational stations included fish surgery, telemetry, aquatic macroinvertebrates, water quality, electrofishing, and food webs. The classroom days included lessons on mapping and trout adoption, fish life cycles, and fish dissection.

Conclusions and Effectiveness of Project:
• The conclusions of the research component of the project will be analyzed in fall 2018. The methods and data collected to date have been the result of collaboration and in-kind support from project partners at the Wyoming Game and Fish Department and Grand Teton National Park. Project partners plan to continue the research study for an additional year using the study design implemented in the 2017-2018 field season.

• The Adopt-a-Trout program is a highly effective and established educational program that introduces over 200 Jackson Hole Middle School students to fisheries and watershed science. It synthesizes “research, education, habitat protection and habitat restoration” in our local community and leverages the support of many partnering organizations and volunteers. Teachers at the Jackson Hole Middle School continue to be supportive of the program and are already planning for its continuation in the 2018-2019 school year.
Fish surgery for radio tag implantation. Photo: NPS

Fixed station used in the Granite Supplemental irrigation ditch component of the study. Photo: NPS.
Solar-powered fixed data-logging station designed by NPS staff. Photo: NPS.

Water quality station led by Teton Conservation District at fall Adopt-a-Trout field day. Photo: WGFD.
Radiotelemetry station led by the National Park Service at the fall field day. Photo: WGFD.

Electrofishing station led by the Wyoming Game and Fish Department at the fall field day. Photo: WGFD.